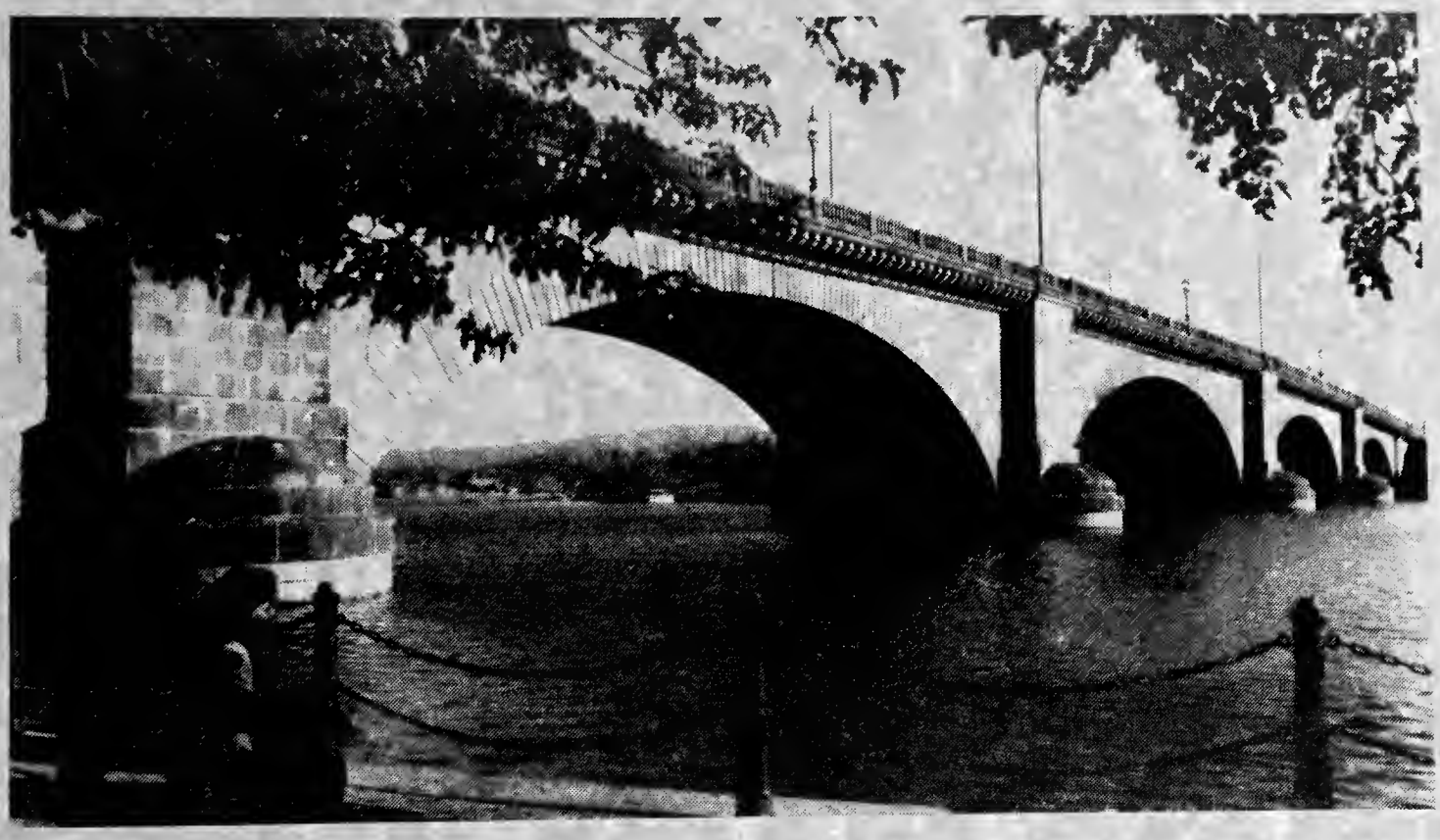


1987
National
Workshop
Summary

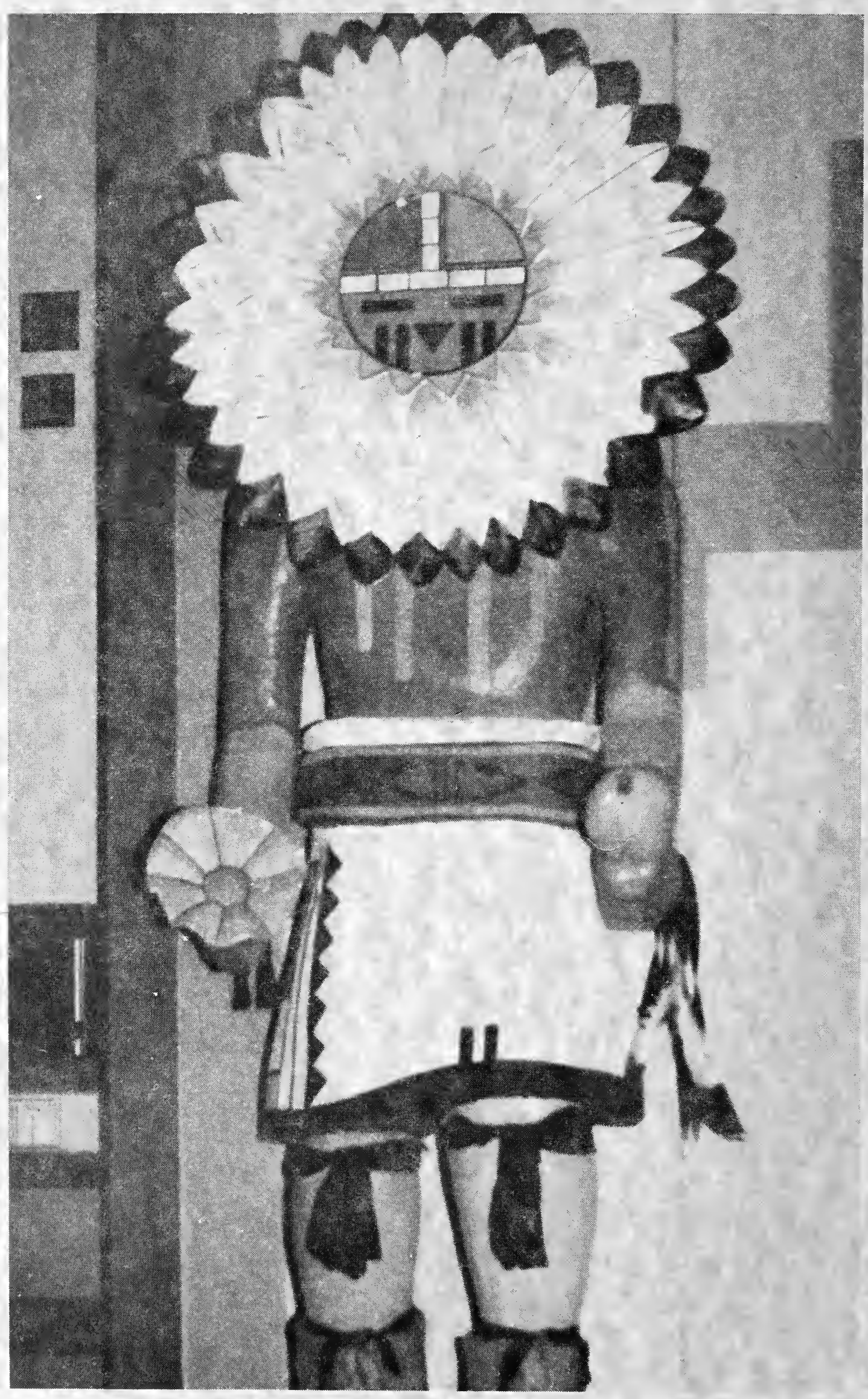
AHEC: BUILDING BRIDGES

From Data Assessment To Action

Education & Evaluation
Clinical Education Issues
Health Promotion/Wellness

Underserved Populations
Resource Development
Management Information System

AHEC
Area Health Education Centers



AHEC: BUILDING BRIDGES

From Data Assessment to Action

1987 National Workshop

Workshop Summary

June 7-10, 1987
Tucson, Arizona

Jointly Sponsored By
U.S. Department of Health and Human Services
Health Resources and Services Administration
Division of Medicine
Area Health Education Centers Branch
Parklawn Building, 5600 Fishers Lane
Rockville, Maryland 20857

In Cooperation With
The Arizona Area Health Education Centers Program
University of Arizona
Tucson, Arizona

Workshop Agenda

June 7, 1987

National Directors Legislative Committee
National Directors Meeting

Constituency Group Meeting
- Advisory Board Members • Evaluators
- Allied Health • Librarians
- Center Directors • Nurses
- Dentists • Osteopathic Medicine
- Educators • Pharmacists

Arizona AHEC Advisory Board Meeting
Welcoming Reception — Western Dinner/Dance

June 8, 1987

Welcoming Remarks:	**The AHEC Experience: An Orientation** Andrew Nichols, M.D., M.P.H., Professor of Family and Community Medicine, University of Arizona, College of Medicine, Director, Arizona Health Education Centers, Tucson, Arizona The Honorable Greg Lunn, Arizona State Senator Chairman, Health and Welfare Committee
Film:	**"Building Bridges"** Produced by Eastern Virginia AHEC
Film:	**"Building Bridges"** Produced by Arizona Health Education Centers
Plenary Session:	**Bridging the American Dream Into the 21st Century** Moderator: Cherry Tsutsumida, M.P.H., Chief, Area Health Education Centers, Division of Medicine (HRSA)
Discussant:	Vivian Pinn-Wiggins, M.D. Professor and Chairman of Pathology Howard University College of Medicine Washington, D.C.
Respondent:	Maria Elena Flood, Texas Tech University El Paso, Texas
Respondent:	Donald L. Weaver, M.D. Director, Division of Medicine, Bureau of Health Professions, Health Resources and Services Administration Rockville, Maryland
Respondent:	Beulah Allen, M.D. Indian Health Services Fort Defiance, Arizona
Concurrent Workshops:	**Changes in Reimbursement System** **Process Evaluation** **Public Information** **Geriatrics/Aging Issues** **Adolescent Pregnancy** **Health and Education Issues for Blacks**
Plenary Session:	**The Supply of Physicians for the United States:** **The Nature of the Problem**
Moderator:	Louis Kettel, M.D. Dean, University of Arizona College of Medicine, Tucson, Arizona
Discussant:	Thomas J. Kennedy, Jr., M.D. Associate Vice President Association of American Medical Colleges, Washington, D.C.
Concurrent Workshops	**Resources Development at Center Level** **Off-Campus Degree Program/Career Ladder** **Strategic Planning (Long Range)** **Community Mental Health** **Women's Health Issues** **Rural Health And Education Issues**

June 9, 1987

Concurrent Workshops:	**State Funding at Project Level** **Outcome/Input Evaluation** **CE as a Entrepreneurial Activity** **Child and Sexual Abuse** **Student/Residents Role in Prevention** **Health and Education Issues for Hispanics**
Plenary Session:	**The Evolution of the AHEC Program** **Bridging Our Past With Our Future**
Moderator:	Thomas Hatch, M.A. Director, Bureau of Health Professions
Discussant:	Eugene Mayer, M.D. Director, North Carolina AHEC Statewide Program, Chapel Hill, North Carolina
Concurrent Workshops:	**State System Support for Local AHECs** **Minority Recruitment and Evaluation** **Staff Organization and Development** **Acquired Immune Deficiency Syndrome** **Networking: An AHEC Bridge for Wellness and Prevention** **Migrant Health Issues**

June 10, 1987

Concurrent Workshops:	**Foundation Funding** **Changing Manpower Patterns** **Computers in Management** **Nutrition** **Substance Abuse** **Native American Issues**
Plenary Session:	**"Education Opportunity for Rural and Minority Populations"**
Moderator:	Gordon Krutz, Ph.D. Professor of Anthropology and Director of Indian Affairs University of Arizona, Tucson, Arizona
Discussant:	The Honorable Peter MacDonald Chairman, Navajo Nation, Window Rock, Arizona

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Shirley Weaver, Ph.D.
Director, University of New England
College of Osteopathic Medicine
Biddeford, Maine.

INTRODUCTION

This year's theme, "AHECs: BUILDING BRIDGES," is symbolically descriptive of what is going on in every part of the nation where Area Health Education Centers exist. The subtitle, 'From Data Assessment to Action', reaffirms the program's responsiveness to changing educational needs as health care delivery systems evolve and new health problems emerge.

This year's workshops showed the vibrancy of the AHEC movement. Although the core purpose of these workshops is technical assistance, the planners of the meeting included other groups and other participants who shared concerns for the educational needs of health professionals and students.

It was also a time to reexamine and reassess what AHECs are and what they stand for at a time of great transition. The visual as well as oral presentations all interfaced to present a common framework for the three-day discussions.

These proceedings will hopefully serve as a document to remind and review the thoughts that were exchanged and expressed during those warm days in tranquility on the Arizona Desert.

Special thanks go to Dr. Andrew Nichols and his staff for a fine job in making our stay memorable. Also, much gratitude is extended to Dr. Nichol's National Planning Committee, composed of Mike Byrnes, Kentucky; Nancy Clark, Oklahoma; Edwina Hamby, Tennessee; Michael Huppert, Massachusetts; Jeff Johnson, Virginia; Clark Jones, California; Red Koelling, South Carolina; Dr. Eugene Mayer, North Carolina; Meryl McNeal, Georgia; Pat McPartland, Massachusetts; and Ricki Ann Saylor, Ph.D., Colorado.

Finally, a note of appreciation to Joe West of my staff, and Bernard Stewart, our contractor, for ensuring that all the contractual needs were met.

Cherry Y. Tsutsumida, M.P.H.
Chief,
Area Health Education Centers

This Report was complied and produced by United Management Systems, Inc., Phoenix, AZ, under Contract Number HRSA 86-497[P] issued by Health Resources and Services Administration, Rockville, Maryland.

FOREWARD
NATIONAL AHEC WORKSHOP

These proceedings represent most of the plenary sessions and highlights among the breakout sessions at the 1987 Area Health Education Centers Biennial Meeting. Many other excellent papers were presented at this meeting, but could not be included in the proceedings simply because of space limitations.

The Arizona AHEC Workshop represented a milestone in National AHEC program development. First, it was the largest biennial meeting ever held, with over 550 registrants. Second, it was the first conference to be held with a full complement of "third generation" AHEC projects. Third, it was the first time that a National AHEC meeting has been brought to the southwest, in recognition of the truly national nature of the program.

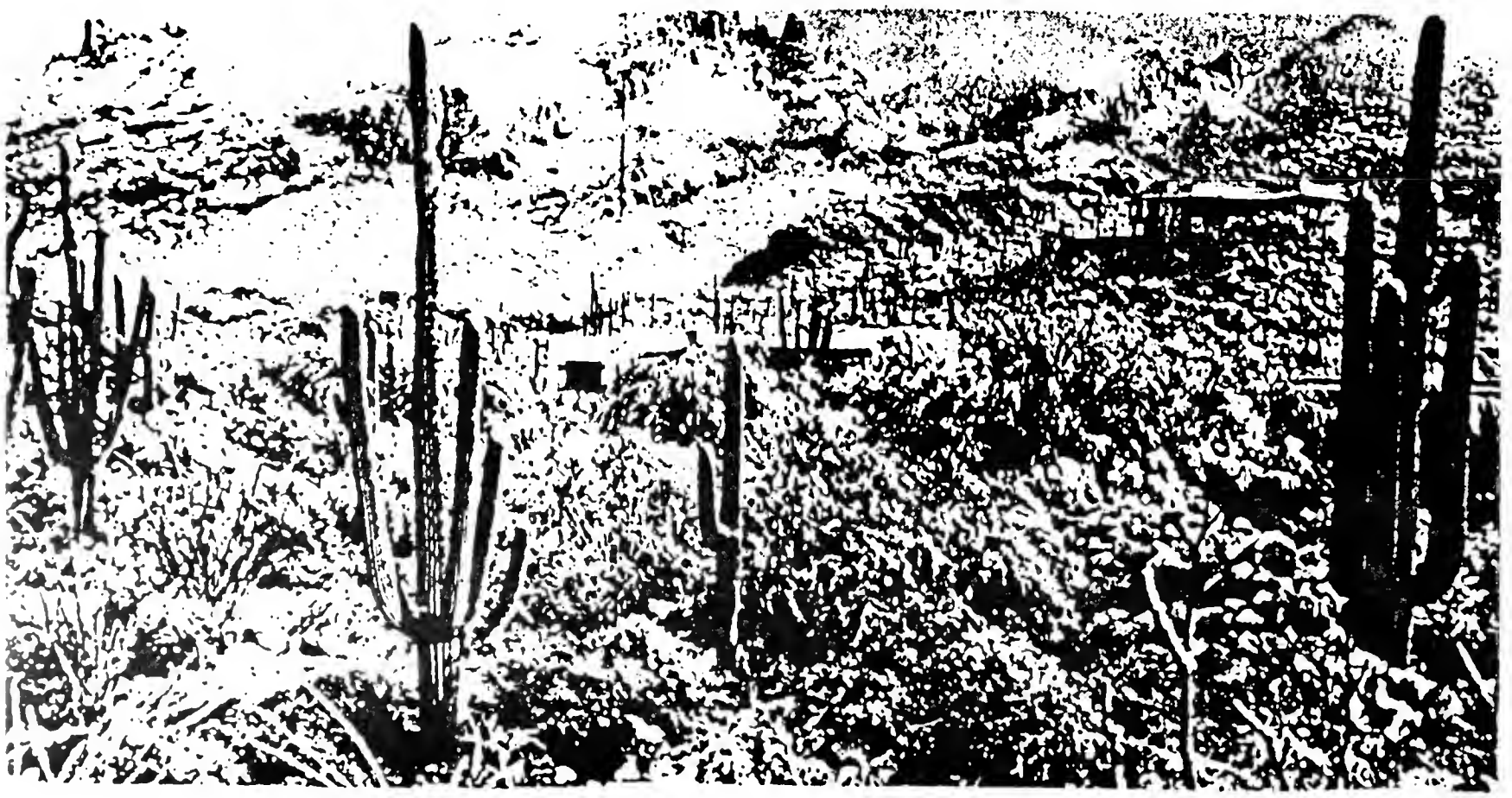
Never before have there been so many Area Health Education Center programs in so many states. AHEC is a program that has come of age; a program that if it were not in existence would have to be invented.

The theme of the 1987 annual meeting says it all. The AHEC program, wherever it exists, is about the business of "Building Bridges." It is linking town and gown. It is re-deploying health professionals from overserved to underserved areas. It is offering a mechanism in place for the solution of new and vexing societal problems, such as AIDS. In short, AHEC is a bridge already built.

The 1987 National AHEC meeting celebrates this fact. It explores the data accumulated to date and charts directions for future action. It moves us from data to action.

Tucson, Arizona will be remembered as the best and the biggest National AHEC meeting ever held — until 1989. May our meeting in Louisville, Kentucky be even better and bigger.

Andrew Nichols, M.D., M.P.H.
Director
Arizona Area Health Education Centers Program



EXECUTIVE SUMMARY

More than 550 persons attended the National AHEC Workshop June 7-10, 1987. The meeting, held in Tucson, Arizona, had as its theme "Building Bridges. From Data Assessment to Action." The concept, quite simply, was to take all of the many lessons learned from AHEC-generated data over the years and begin to apply them to social problems facing the nation.

After an opening plenary session, which featured a presentation by Arizona's AHEC Program Director, Dr. Andrew Nichols, and two films on "Building Bridges," one from Eastern Virginia and one from Arizona, the session turned to an exploration on "Bridging the American Dream Into the 21st Century." This session, moderated by Cherry Tsutsumida, featured a presentation by Dr. Vivian Pinn-Wiggins, with response from Ms. Maria Elena Flood, Dr. Donald Weaver and Dr. Beulah Allen.

Dr. Pinn-Wiggins documents the under-representation in medicine of ethnic minority groups and the relative decline in their educational participation since the early 1970's. She reminded the workshop that the GMENAC report of 1980 stressed the need for increased participation by women and under-represented minorities in medical education. While the evidence is weak, she observed that minorities tended to return to their own communities to practice. The need for role models as minority faculty was emphasized. The health status of minorities, she noted, should provide an "ethical impetus" for medical schools to increase their percentage of minority students.

Maria Elena Flood, responding to Dr. Pinn-Wiggins, noted that the problem was even worse among Hispanic Americans than with blacks. She went on to assess that we need to educate all our health professionals regarding the needs of minority populations in the next century. Moreover, she stated that we need to be the instigators of new forms of health care delivery, as well as educators. The meeting ground of education and health care delivery will be in the field of ambulatory care.

Dr. Donald Weaver responded that while the task is large, it can be accomplished little by little. The AHECs have made a substantial move in this direction. Dr. Weaver affirmed the bridging affect of AHECs and singled out AIDS as a problem to be resolved with AHEC participation. He quoted the second American Assembly, which noted that "all Americans should have access to quality medical services, even in today's health care environment." AHEC can help provide that access. It is up to us, the AHEC people, to make it happen.

The next speaker, Dr. Beulah Allen, spoke as a minority physician who had returned to serve her people. She stated that it was very important for Native Americans to be able to study and work in their own community — and return to that community. She reviewed the history of thirty years ago, when Indian children were deprived of their cultural identity in off-reservation schools. She felt that the AHECs should help in the process of making educational opportunity available to all minority groups.

The next plenary session was presented by Dr. Thomas Kennedy, Associate Vice-President of the Association of American Medical Colleges. Dr. Kennedy began by noting the large increase in medical schools and medical graduates in the decade between the mid-1960's and the mid-1970's. This was followed by the Graduate Medical Education National Advisory Committee (GMENAC) report, which warned of a surplus of physicians by 1990 and thereafter in the United States in all but a few fields. He then documented the inertia of the existing physician pool, given retirement and production trends, and the difficulty which would be faced in trying to change it. Further, perception of physician need is a complex issue based on many

unforseen events and is laden with valued judgments. The best hope for corrective action is at the local level.

Dr. Eugene Mayer then addressed a series of questions asked about the Area Health Education Centers Program and provided rhetorical answers. He began by noting that AHEC has periodically been pressured to become something other than what it is, a community-based education and training program for health care providers which links academic health science centers with community service agencies and practitioners. His questions and answers were as follows:

Q: What about the physician surplus?
A: AHEC has never produced a single physician, but focuses on appropriate distribution, retention and quality issues in medical education.
Q: How can physician training programs survive increased hospital costs?
A: This will be accomplished by greater use of ambulatory education, a strength of the AHEC program.
Q: How can we pay for AHECs in an era of Federal budget deficits?
A: By reallocating a very small amount of money from medical treatment programs, the military or other sources.
Q. Can we count on cooperation to continue in a competitive era?
A. AHEC partnerships will promote, not hinder, institutional survival.

Dr. Mayer went on to point out that AHEC is an "active" bridge, which encourages creativity and responsiveness to new community needs. If AHEC did not exist, we would have to invent it.

The final plenary session was given by Peter MacDonald, Chairman of the Navajo Nation. He began by noting that "AHEC is an old friend," which has spoken to the limitations of the current health care system. It has fought ignorance with knowledge in its struggle to remedy the failures of the market system with regard to health professional education and distribution. How, he asked, can we turn consumers of services into producers? How can we find a bridge to the traditional economy, as we have already built bridges between high-tech scientific medicine and traditional medicine? His answer lay in a proposal to barter services for products and other services. In short, he suggests turning consumers into producers of health.

The Workshop had many concurrent workshops as listed in the Table of Contents. Several of these are highlighted in these proceedings as examples of what was discussed. These include a session on Process Evaluation, one on Women's Health Issues, a workshop on Health and Education Issues for Hispanics, and, finally, a session on State Funding at the Project Level. Each of these workshops brought together a number of different health professionals to discuss the problem and make recommendations for action.

The 1987 National AHEC Workshop was clearly a time for moving from data assessment to action. It was a time for building bridges. It was an opportunity to recognize AHEC itself as a "bridge already built," which will be a vital tool in resolving many problems yet unknown.

The message of the 1987 National AHEC Workshop is that the AHEC system should be seen for what it is — a national resource treasure. It is a system that would have to be built if it didn't already exist. It is a resource which deserves to be supported, maintained and used.

"WELCOMING REMARKS"

"THE AHEC EXPERIENCE: AN ORIENTATION"

MONDAY, JUNE 8, 1987

Dr. Andrew Nichols

We would like officially to welcome you to the National AHEC Workshop and we look forward to an exciting conference together, starting today. We have a very interesting beginning which is going to capture the theme of this week's conference, "Building Bridges." We are particularly privileged to have the donation of a film by the Eastern Virginia AHEC, which we feel captures the spirit — both of the theme of this conference, and of the AHEC movement generally. And so its with great pleasure that we bring to you the film made by the Eastern Virginia AHEC on "Building Bridges." Thank you.

EXCERPT FROM EASTERN VIRGINIA AHEC FILM: "BUILDING BRIDGES"

NARRATOR: What makes a good idea? The best ideas are the ones that make the complex more simple, solve problems, or makes the effort go further. The Area Health Education Centers Program is a good idea. AHEC is a maker of liaisons, forger of coalitions, a "builder of bridges." What is an Area Health Education Center? AHEC is an educational outreach program that links health professions institutions with the needs and resources of surrounding communities. By establishing relationships with community organizations and university health science programs, AHEC helps develop educational experiences that will improve the quality and availability of primary health care delivery.

The AHEC concept is one which is a partnership between the educational institutions and the community which tries to define the problems and to provide the sites where educational experience could be provided to medical schools, who are willing to send their students out there. Through the Department of Health and Human Services, Bureau of Health Professions, the federal government awards an AHEC contract to a medical school. The medical school in turn helps to establish community AHEC centers that work with universities, health professionals, and community organizations to develop training experiences in medically underserved rural and urban areas. The result is an effective relationship - a bridge between "town and gown."

Building and maintaining that bridge is the heart of the AHEC concept. The whole spirit behind AHEC is the idea that if you bring the university off campus, in an organized way, you make it less "ivory-towered" and at the same time, you make the community less isolated, more enriched, more likely to recruit positions and people to the region because of the presence of professional stimulation. Once those people are there, you would like to think that you are more likely to keep them.

AHEC is a national program. Area Health Education Centers operate in most states to help improve the supply, quality, and distribution of primary health care providers. To visualize how the process works, we can look at the Eastern Virginia AHEC as one model. There, the AHEC program is operated in conjunction with the Eastern Virginia Medical Authorities. Three community AHEC centers in the rural Western Tidewater, in the inner cities of the Peninsula, and Norfolk, work closely with five regional universities, professionals, and community organizations to bring education and service where it is needed most.

AHEC's relationship with the community is through its leaders who in turn, work with training staff, have better communication systems which benefits the community by providing new opportunities for citizens to get health care through education. That, in turn, has given the universities an ability that they have not had before, even though we try to address needs, as well as we can, as we train students.

Students in medicine, dentistry, pharmacy, nursing, social work, and allied health professions take part in community experiences coordinated by AHEC. These training opportunities help enhance their education and broaden their perspective in bringing primary health care to those who need it most. These training experiences take place in area clinics, hospitals, nursing homes, churches, public schools, and health departments. On some occasions though, student training occurs much further from home.

Each summer, Virginia's Eastern Shore is home to thousands of migrant farm workers who come to work the harvest. The migrants' life and work are strenuous. They are often unable to find the health care that they badly need. The Eastern Virginia AHEC works with the local primary health provider to coordinate clinical experiences for students of dentistry, dental hygiene, medicine, nursing, and medical technology. Students live and work in an interdisciplinary setting that fosters teamwork and mutual understanding.

Student comment:

"I feel a lot more confident in my skills. Rural medicine is very different from metropolitan medicine. You're talking about basics here. You rely a lot more on your skills as a clinician in doing a physical exam and figuring out what is going on in problem-solving. I'm becoming more and more interested in rural medicine, a real area that is looking good. I grew up in a small town and it's looking better all the time."

Clinical experiences in urban settings also give students a chance to provide care to people outside the mainstream of health services. At clinics like Crestwood in Chesapeake and Park Place in Norfolk, students from multiple disciplines help provide care under faculty supervision.

Student comment:

"Generally, the people we see here have not had medical care. That seems to be one of the focuses of the project, that is to not only provide continuity of care, but to provide care for a population that has been missed. This clinical experience teaches me a lot and allows me to actually apply what I'm learning in the classroom in basic science."

It is one thing to encourage health care professionals to go to a rural or inner-city area to practice. It is another to keep them there. Another AHEC goal is to support health care practitioners with continuing education so that they can keep their skills current. In Eastern Virginia, AHEC has helped to provide continuing education for area pharmacists.

Pharmacist comment:

"Today, I guess, about 90% of the drugs that we are dispensing were not even on the market 10 years ago. It's very difficult to keep up, although I have tried. I was very excited about this course that was offered at Eastern Virginia Medical School."

Faculty comment:

"Topics and pharmaceutical therapeutics drew twice as many students as we expected, and they stuck with it even though the material was pretty challenging. When I got down to Norfolk for the first class, I was really surprised at the number of pharmacists who turned out for this course. Fifteen weeks takes quite a commitment."

AHEC supports a number of continuing education activities for doctors, nurses, teachers, and others whose skills must remain current in order for them to be effective.

Another role of AHEC is to place health science students in area classrooms to discuss topics important to area teenagers. Young people become aware of the role they play in maintaining their own health, and they get answers to tough questions on topics ranging from substance abuse to venereal disease. Sessions are frank, honest, and credible and the encounter is rich for both sets of students.

AHEC student comment:

"I think it's easier for them to talk with us, more so than it is to talk with a teacher. We're not grading them, we're not really watching them, watching their behavior and making mental notes for future evaluation. I think they feel a lot more comfortable talking with us. All too often patients don't ask questions of their doctor, and patients need to and they should ask questions about what is wrong with them so that they can better understand themselves. If they get the idea through us that we are approachable and that we will listen to their questions and problems, then that will be a good thing."

AHEC is a good idea. It brings badly needed primary care to medically underserved areas. It sup-

ports health care practitioners with continuing education, a vital component in keeping professionals current, no matter how isolated their practice. And it substantially increases the reach and effectiveness of each dollar spent on health education by fostering cooperation among diverse groups. AHEC makes new relationships strong and existing relationships stronger. It "builds bridges." That's good. That's what AHEC does best.

Dr. Nichols

And now for the official words of welcome from the government of Arizona. We have asked Senator Greg Lunn, who is chairperson of the Health Committee in the Arizona State Senate, and repeatedly voted one of the most outstanding state legislators in our legislative assembly, to deliver words of welcome on behalf of this State.

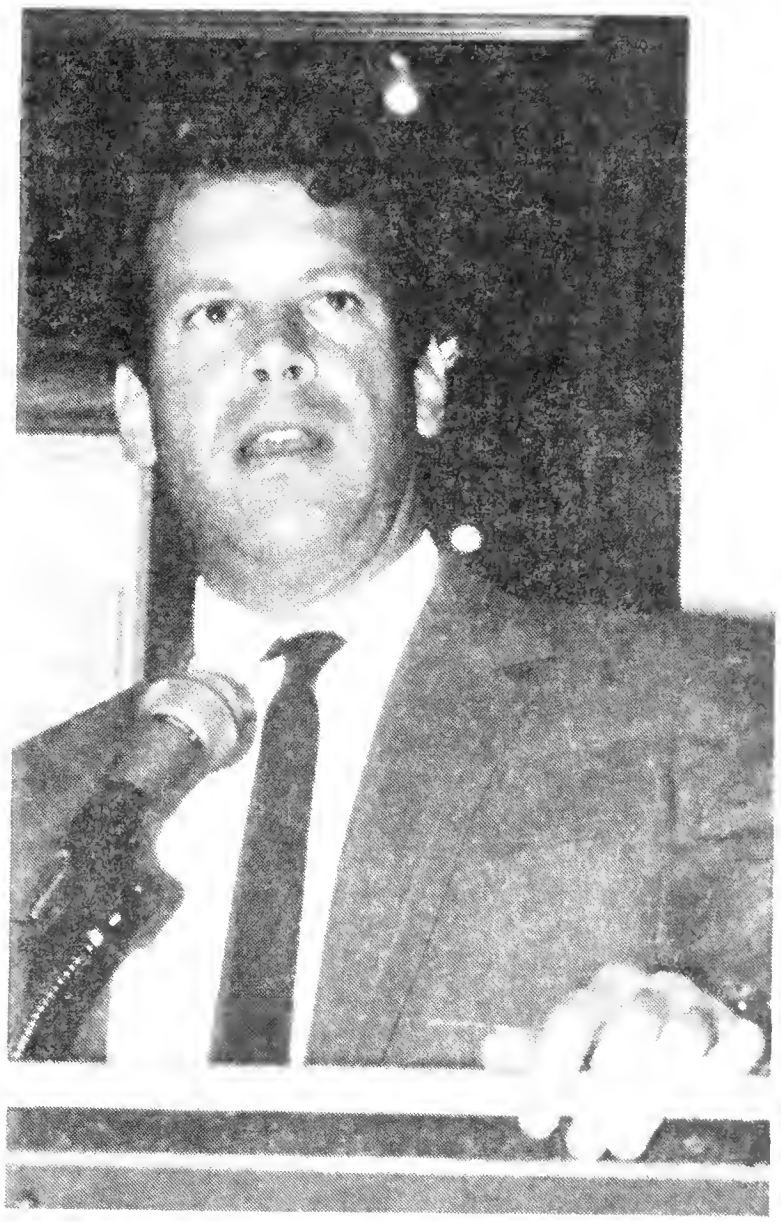
Senator Lunn

Thank you very much, Andy. I would like to welcome all of you to Arizona and the Sonoroan Desert. In the summer time, for those of you who think your fate after death may not be heaven but rather hell, let me suggest to you that the next 3 days represent credit for time served. We, in Arizona, in the lower elevations and the warmer climes are wont to defend our rather torturous summers by suggesting that it may be hot but it's also dry, which is a little like saying that not only will you be warm, but you will be dehydrated as well.

Let me get a little more serious, and suggest to you that we are honored to have you here for the AHEC national meeting. I have been involved with Andy Nichols in trying to get greater legislative efforts toward serving medically underserved areas in the State, and while we haven't been terribly successful, we will continue to try.

In Arizona, we are well acquainted with the problems of having medically underserved areas. Not only do we have pockets within the large urban areas of the Phoenix metropolitan and Tucson metropolitan regions, but a vast expanse in rural Arizona, where only about 15 to 20 percent of our population reside. This population is epitomized by a stagnant economy, very poor opportunities for jobs and economic development, and an economy that tends to be dominated by declining industries and agriculture. A large percentage are ethnic minorities, including most predominantly Hispanics, as well as Native-Americans. Consequently, the goal of the Area Health Education Centers of recruiting and retaining professionals who will serve these areas, now and in the future, to upgrade the skills and educational levels of practitioners who are currently serving those areas, as well as the commitment to public health education in medically underserved areas, is one that I know as chairman of the Senate Health and Welfare Commitee. It is one that we continue to ponder, continue to try to address. We are never really successful in getting the degree of resources that are necessary to meet what continues to be a large problem in this country.

It is with a great deal of pleasure that I welcome you in all sincerity to Tucson, Arizona and hope that the rest of your conference is productive, and hope that you can enjoy your stay here in Tucson and visit our community when you are not engaged in your meetings. Thank you very much.



Dr.Nichols

When I was asked by my colleagues to share a few words about the AHEC movement and help be part of setting the tone of this conference, I was somewhat humbled by that invitation, realizing that most of the people in this room would be quite familiar with AHEC. Some would be leaders of AHEC, and a few would be those who have started the program and been with it from its very beginning. And then I reflected on the basic theme of the workshop, which is "Building Bridges." It occurred to me that this captured the emphasis of what we were talking about. Not that AHEC was a "bridge being built," but that AHEC is a 'bridge already built."

The United States has many needs in health care. In recent years, we have been hearing an awful lot about AIDS. We hear about drug addiction, we hear about mental illness, we hear about the prob-

lem of the homeless, and we see as the "disease-of-the-month club" progresses and unfolds, that the nation is looking for ways to deal with these problems. It occurs to me that that way is present — it is to be found in over 30 states. It is a way of addressing the educational needs of health professionals who must come to grips with the problems we face, new problems and the old, and that way is AHEC.

Since becoming involved as an AHEC Program Director, I have had the opportunity to serve on the Editorial Board of the AHEC Bulletin. For those of you who are not yet acquainted with that fascinating publication, (which is more than a newsletter, yet perhaps not exactly a journal), I encourage you to become familiar with it. At a recent editorial board meeting, we decided that we wanted to follow up on this theme of how AHECs can be used as a vehicle for addressing some of the major health problems of this country. Therefore, we did a survey to find out what AHECs were already doing.

For example, we looked at the problem of AIDS. We found that there were 213 continuing education opportunities in the last year, reaching 4,993 health professionals, and another almost equal number of non-professionals. When we asked AHECs around the country what they were doing with drug addiction, we found that some 37 AHECs said they had reached some 3,069 health professionals and 23,000 non-health professionals on the subject of drug addiction (these were only partial surveys).

I returned to my thinking about "bridge building" and about some of the Arizona "bridges" that we have and the pictures that we had requested from other AHECs.

This is the Grand Canyon Bridge which goes over the beginnings of Lake Powell, one of the most beautiful lakes in the country. What this bridge demonstrates to me is the opportunity for passage over a large body of water. Further back, Lake Powell is rather wide. Here, you can take a boat or you can take a bridge, and I assure you it's much faster to take a bridge. So it is that we tend to think of AHEC as a kind of bridge that moves us more quickly than we can otherwise go from one side to the other side.

Yet another kind of bridge is represented by what we are going to be building, now that contracts have been let, near the dam on Roosevelt Lake — the first reclamation dam in the country. This dam is now being enlarged, and this is a model, as is the next slide, of one of the two possible bridges that will be built to cross that body of water. Currently, people cross on the dam, as they do on Hoover Dam. There are problems with that in terms of traffic congestion and security. The bridge will solve that. Once again, by analogy, we would like to think of this bridge as representing the kind of facility which the AHEC program provides. We can cross from one side to the other more readily . . . and securely.

The next bridge is more typical. It is in our Salt River Canyon and crosses a chasm that otherwise could not be crossed. We feel that many times we enter those situations in the field of practicing medicine, or practicing health sciences generally, and that we need a bridge to get across. Indeed, the Salt River Canyon bridge represents such a bridge.

Now we have one other bridge and it's the last bridge I'll show you. It is the most famous bridge in Arizona — the London Bridge. It became famous somewhere else. It was brought over here stone by stone by a fellow named Robert McCullough, and built over dry land. Perhaps they weren't quite sure what was going to go under it, but when they finished building it in the barren desert, they put a lake under it. They took what was a peninsula and they connected it with the bridge, then dug a lake under it and made it into an island. And to me, that represents the unknown problems that we have to surmount as we build our bridges.

Let me conclude by asking how often we find new problems that challenge us where we don't anticipate them, but where if we have a structure in place, we can surmount them. I submit that AHEC is our national resource, already in place, prepared to provide crossing of gorges that did not previously exist. AHEC, my colleagues and friends, is a

precious national resource. Let us recognize the treasure we have in this institutionally structured and locally based network of professional health education centers and programs around the country. These are programs that are ready and able to meet new challenges.

AHEC programs are both old and new — they are traditional and innovative. The message should be clear at the conclusion of this National Workshop that AHECs indeed work. They are tried and proven as a vehicle for instituting change in promoting health manpower distribution to medically underserved areas. Services are now available to solve some of our most basic health problems. Let us use them wisely. To rebuild them would be incalculably expensive. To expand and maintain the existing AHEC network is both fiscally prudent and programmatically sound. AHECs, then, are "bridges already built." They will lead us from data assessment to action. Let us nurture them and use them well. Thank you.

We now have a little surprise with which we will conclude these opening session remarks.

(Dr. Nichols presented a film dedicating Lake Havasu City, Arizona AHEC branch office of the Western Arizona area, with the Mayor of Lake Havasu City cutting the ribbon at the dedication. The following speeches were given at this dedication service.)

The Honorable James Spezzano,
Mayor of Lake Havasu City, Arizona

"As the mayor of Lake Havasu City, it gives me great pleasure to participate in the ribbon cutting ceremony for the Western Arizona Health Education Center's office. From what I understand of the operation, it will be of great assistance to us as we try to recruit personnel in the health field and retain them. The Center will enable them to go on with their training, retain their certification, and improve their status. Anything that adds to the health care of this city is of great benefit and is very welcome. It is with great pleasure that I now cut this ribbon and welcome this Western Health Education Center to Lake Havasu City."

John Perra, Executive Director,
Lake Havasu Chamber of Commerce

"My name is John Perra and I'm the Executive Director of the Lake Havasu City Area Chamber of Commerce. I am very pleased today to attend the grand opening of the WAHEC here in Lake Havasu City. Lake Havasu City is a growing community on the Colorado River and its most famous asset is our London Bridge. We are very pleased with the opening of the WAHEC office in Lake Havasu. We have an outstanding hospital here with excellent physicians and staff, and the opening of this office can only further the education and ability of these people to provide medical service. WAHEC will be exceptionally pleased to have an office in Lake Havasu because you will find medical personnel who are extremely receptive to your continuing education programs. I think it will be a most successful office for WAHEC."

Dr. Robert Cannell, Medical Director, WAHEC

"Myself and other doctors in Yuma are very excited about getting involved in the education of health professionals. It is our chance to improve our continuing education, which has been fairly sporadic in our somewhat isolated area. Out here, many people in the health professions feel isolated, both from the training they had previously and from interaction with professors.

Particular needs are in pharmacy. The pharmacists in our area are usually pretty well tied down to their businesses and it is hard for them to obtain continuing education. They are excited about the prospects of bringing in education that can give them credit towards certification. Also, our nurses are limited in their ability to go on with their education. Through ties with Northern Arizona University in Flagstaff, and with our WAHEC being involved, it looks like we will be able to establish programs of continuing education.

There are many health professions who are going to be helped by these bridges we are building, not only with the University of Arizona, but with Northern Arizona University and Arizona State. This will improve the quality of education, and will also improve the quality of our practices and professional lives in Yuma."

Dr. Dennis Zielinski, Administrator,
Lake Havasu City Regional Hospital

"The two biggest problems facing us as employers and educators are: one, recruiting qualified licensed people; and two, finding a way to continue their medical education or continuing education, whatever their discipline.

Clearly, the non-urban or regional areas of the state find it more difficult to attract and to retain qualified medical personnel, both for professional and para-professional. We certainly look forward to the influence the WAHEC can have, on both the entry level and the existing level. This will bridge the "brick and mortar" of the University academic setting out beyond the urban metropolitan area and extend its reaching out into the rural areas, where I feel the human resource medical manpower pool could certainly be significantly improved. Our

medical staff looks at this as a real opportunity to challenge their own expertise and also, in terms of the latest medical thought coming out of the current University setting. They are very much looking forward to having a student in the environment to test their mental functioning and bring them up to date in terms of what is currently the "cutting edge" of thought in the academic setting. They are looking forward to being participants in this program as preceptors."

Dr. Joseph P. Harrington, Administrator, Bullhead City Hospital

"I think all of the physicians that we have on active staff at Bullhead City Hospital are really looking forward to the program. There are a number of physicians who have been there for a number of years and are really anxious to be preceptors for new physicians. New students are coming into the area, who are particularly anxious to share their skills and expertise in rural medicine. These are people who have lived in the rural areas and have seen Bullhead City grow from a community of 2,000 to 25,000. I think that they are really encouraged. They want to see people come out of residency programs and relocate in rural Arizona. This could be a step in helping physicians to locate to rural areas of the country."

Dr. Anthony Vuturo, Head of the Department of Family and Community Medicine, University of Arizona College of Medicine

"When people come and plan to build industry, to develop new activities, the very first questions they ask are: 'What are the health services?' 'What is going to be available to the employees of the company?' 'How far will the people have to travel for these services?' 'What's going to be available for the children in terms of future careers?'

That's what AHEC is all about. We're committed to working with the people locally. We're committed to helping them define their program. We want to do the best we can to contribute to our state and to develop it over the future."

Dr. Andrew Nichols (at the dedication ceremony)

"As I was looking at the London Bridge, I was reminded of the story about how it was built and thinking of analogies. My understanding is that the bridge was unassembled, block by block, in London, England, and brought to Lake Havasu, Arizona and reassembled . . . but not precisely the way it had been assembled in London. Yes, exactly the same order, but on the inside, as I understand it, this bridge is hollow and reinforced with steel as opposed to being solid stone.

We have, in short, taken an old principle that worked for 600 years or more in England, and have transported it to Arizona, using modern technology. Much of what AHECs do is very old. We are talking about preceptorship experiences. We are talking about continuing education experiences. These are not new ideas. But we would like to think, as with the London Bridge, that we are employing new technologies to make these ideas dynamic and relevant to the world today. AHEC is an exciting adventure in education. We look forward to sharing that educational experience with you."

Dr. Andrew Nichols

Again, I welcome you to Arizona. At this time I will turn the program over to Ms. Cherry Tsutsumida.

PLENARY SESSION:

"BRIDGING THE AMERICAN DREAM INTO THE 21ST CENTURY"

Ms. Tsutsumida

On behalf of the National AHEC program, I would like to welcome you to the Third National AHEC Workshop. I saw Colorado and I saw Ohio, but I must say that my state of Arizona has done me proud. And, Andy, I want to say thank you to your entire staff and to your wonderful Senator Lunn, who was here to join us and to give us those greetings, which I thought were so appropriate. Incidentally, when I was in high school, I was the first woman to ever address a joint session of the Arizona Legislature, so if you would like to invite me back, I would be very happy to address another joint session and talk about state funding.

"Bridging the American Dream Into the Twenty-First Century" — that's the theme for our panel today. Last night as I sat in my room, I pondered on how ironic life can be. The first time I came to Arizona as a child of 7, it was at government expense to a war relocation camp in the middle of the desert, some 60 miles from here. Yesterday I was again in Arizona, again at government expense, but this time I slept in a suite larger than the size of four barracks, which would have housed four families for the duration of the war. And I thought to myself, how ironic life can be. Bridges — emotional bridges, bridges over troubled waters, bridges which can span to serve professions, institutions, ideals, and dreams, and bridges which remind us that we have to keep moving and which help us to keep moving.

When the planning committee chose the theme "Bridging the American Dream Into the Twenty-First Century," I think we were trying to develop a context. We wanted to put this workshop into the context of, 'What in the heck are we all about, anyway?" Tomorrow you will hear Eugene Merrick discuss specifically the bridges as they relate to AHECs, but today we are talking about bridges in terms of broader goals — national goals.

I think it is very appropriate that we are doing this in the 200th anniversary year of our Constitution. For those of us who like to remember and be historical, like Red Koelling from South Carolina,: "We the people of the United States, in order to form a more perfect Union, establish justice, ensure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America."

At this session this morning, we respond to a Charter that's larger even than 781A1 and A2, and regulations that were published in the Federal Registry, outlining the program. We ask ourselves what our founding fathers would feel, and we must say quite candidly, that they 'punted" on the issues of health and welfare. I don't think they really thought too much about it. But I think we are asking ourselves today, if they were to see us, how did "posterity" do in ensuring the general welfare that they proclaimed in their Constitution? To help us today, we have called upon experts in the health area to talk about some of the ways, some of the specificity, that we in health are trying to respond to in that general charter.

I'm so pleased to have as our major keynote speaker a woman who is an example to all of us, a person who has succeeded in all she has endeavored, a woman who perhaps is probably as much known to the private sector as she is to the government sector; as much known to third-party carriers as she is known to academic institutions and to professional organizations. This woman was born in Lynchburg, Virginia. She graduated as a valedictorian of her class in high school. She went to Wellsley and got her degree at the University Virginia School of Medicine. Her credits, including her publications, her outreach to various private and professional organizations, are too long to list. So, without further ado, I would like to present my friend, our colleague, Dr. Vivian Pinn-Wiggins.

Vivian W. Pinn-Wiggins, M.D.
Professor and Chairman of Pathology
Howard University College of Medicine

"Bridging the American Dream into the 21st Century" is a fascinating and marvelous concept. But implicit in our thoughts of a brighter tomorrow is the expectation that all American people will dream of a tomorrow filled with health, happiness, and some measure of fulfillment. And, with our emphasis on health, and a general acceptance that without good health, little else is possible, we must consider issues of minorities in the health care system of our country.

The issue of minority access to medical education and improved health care is of vital importance in the current and future status of health and health care for all Americans. The future of health care and the status of minority health depend in large part upon continued opportunities for health equity. AHEC, by its role in bridging the community, in the broad sense, and the University, is in a unique position to have a sound impact on the future development of health access.

There are ever-increasing constraints, limitations, and demands being placed upon physicians, those who provide medical education, educational opportunities, and training, and those who provide medical care by external agencies, such as federal and local government, social agencies and organizations, private insurers, proprietary health agencies, legal evaluators of standards of practice, and media influences on the whims of the patient population and their expectations for health care.

Health care providers and the institutions they represent must take a more active responsibility in directing their own futures through bringing about their own innovative approaches for better access to optimum health care for all segments of our population, while devising methods to address the effects of the public and governmental desire for cost containment.

Eli Ginzberg in a recent issue of the New England Journal of Medicine stated:

" . . . several new factors — including the ever-increasing number of physicians entering the profession, the decreased opportunities for residents to practice their specialties, the unchecked rise in malpractice insurance premiums, the standardization of medical practice in prepayment and managed care systems, the marketing tactics pursued by for-profit medical enterprises, and the financial stake of physicians through ownership or partnership in facilities and equipment to which they refer their patients — suggest that the environment and the ethics of medical care are changing and will continue to change. During this time of destabilization, there is a risk that important values may be lost. Whether they are lost will depend upon the quality of the medical leadership and the response of the public."

We all have a responsibility to preserve the ethics, values, and sensitivities which many of us have fought and strived for over the years. This responsibility should emphasize concerns about the poor and the disadvantaged, of whom minorities comprise a significant percentage.

The underrepresentation in medicine of certain ethnic minority groups - Blacks, Mexican-Americans, American Indians, and Mainland Puerto Ricans — has been well documented and is well known. Assuring continued participation by these groups in medicine should remain a priority issue in the changing medical environment. Their entry into schools of medicine has never reached the goals set in the early 1970's.

In 1968, there were only 292 first-year minority medical students in this country, with Blacks representing 2.7% of all first-year medical students. At about 1970, when the effort to increase minorities in medical schools began to gain momentum, there were only 1,051 Black American physicians practicing in the United States. However, even with the great increase in Blacks and other minorities being admitted to medical schools other than Howard and Meharry during the 1970's, there has not been a significant increase in the number of students in first-year classes since 1974, when there were 1,473 or 10.1%. In 1985-86, Howard, Meharry, and Morehouse admitted 19.8% of all new first-year U.S. citizen Black students enrolled. In this current year, 1986-87, there were 1,677 first-year minorities, representing only 8.7% of the total first-year enrollment of 16,819 students, and this includes repeating students. Blacks comprised 7.0% (1,174) of the total first-year medical school enrollment for this past year. Although there has been an increase in the absolute number of minority physicians being trained in this country since 1970, the percentage of total minority practicing physicians has not significantly increased. From the 1980 census, of the over 400,000 physicians in the U.S., less than 3% were Black, 0.1% were Native American, and 4% were Hispanic, but this latter figure also includes Cubans, South Americans, and Spaniards, as well as Puerto Ricans and Mexican Americans. Keep in mind that it has been estimated that Blacks and Hispanics will constitute 30% of the U.S. population by the year 2020.

Why the concern about access for minorities into health care professions? Well, first, there has been a desire to attempt to reach parity for minority physicians in proportion to their representation in the population as a whole — thus the term, "underrepresented."

The 1954 Supreme Court decision to bar segregation in public schools in the Brown vs. Board of Education case, the Civil Rights Act of 1964, the Voting Rights Act of 1965, and the assassination of Dr. Martin Luther King in 1968 all led to an intensified public interest in rectifying the past inequities in educational and career opportunities for women, ethnic minorities, and those who were socioeconomically disadvantaged. The 1970 Report of the Association of American Medical Colleges (AAMC) Task Force to the Inter-Association Committee on Expanding Educational Opportunities in Medicine for Black and other Minority Students, which marked the beginning of efforts by medical schools to provide increased access to careers in medicine for underrepresented minority groups, appeared at a time when public awareness of the need to provide equal opportunity in education, employment, and the training for ethnic minorities was most acute.

Following the implementation of affirmative action programs to help provide equal opportunity came legal challenges to this concept and practice. Then came the Graduate Medical Education National Advisory Committee report of 1980, which predicted a surplus of physicians by 1990 because of increasing entering class size in U.S. allopathic and osteopathic medical schools, and the then large yearly influx of alien and U.S. citizen graduates of foreign medical schools. The GMENAC report recommended that medical schools, therefore, reduce the size of their entering classes.

Often overlooked in the GMENAC report was the qualification in Recommendation 26 which stated:

> "Greater diversity among the medical students should be accomplished by promoting more flexibility in the requirements for admissions, by broadening the characteristics of the applicant pool with respect to socioeconomic status, age, sex and race, by providing loans and scholarships to help achieve the goals, and by emphasizing as role models women and under-represented minority faculty members."

Further, Recommendation 8 of the Educational Environment Technical Panel of the GMENAC report was as follows:

> "Programs which increase the participation and visibility as academic role models of women and under-represented minorities should be instituted."

With the fear of legal challenges to affirmative action policies plus reductions in class size by some schools, the number and percentage of minority medical students not only stabilized, but declined.

The declining applicant pool also is not encouraging. Since the peak of applicants in the mid-1970's, there has been a steady decrease in the number of medical school applicants from 2.8 per place in 1973 to 1.9 applicants per entrance slot now. Although the most pronounced decline, 20% between 1982 and 1986, was among white male applicants, underrepresented minority applicants also decreased during this time: Blacks by 8.2%, American-Indian/Alaskan Native 11.7%, Mexican American/Chicano 0.6%, and Puerto Rican (Mainland) by 13%, when the absolute numbers of minority applicants and entrants has never been that large. One exception to this trend has been among Asian/Pacific Islanders, who increased in the applicant pool by 34.7% during the past four years.

In addition, the competitiveness in the admissions process of these underrepresented minorities continues to be of concern. Between 1981 and 1985, the proportion of applicants scoring higher than 10 on MCAT tests increased significantly, and those with higher science GPAs increased. The SAT scores for Blacks are still a standard deviation below white scores; Mexicans and Puerto Ricans, while scoring on the average higher than Blacks, are still below the average scores for whites. Potential applicants are therefore lost at the undergraduate level of entry into science, and socioeconomic or academic deficiencies of these disadvantaged groups further deters the success of their declining applicant pool.

If the concept of equal access to medical education for underrepresented minorities is not the strongest argument for continued efforts for health provider equity, let's consider the trends in health. There has long been some real, and some anecdotal, evidence that health differences exist between majority and minority groups, and that minorities have also tended to use the health care system differently. There was a recognition of persistent disparities in key health indicators, such as life expectancy, infant mortality, and disease mortality, among minority subgroups in the United States, in spite of advances in biomedical research and health care. In response to these inequities, in October

1985, Margaret Heckler, then Secretary of Health and Human Services, released to the public the comprehensive report from the Task Force on Black and Minority Health which documented and defined the marked disparity between the health status of minority Americans and the remainder of the U.S. population, in spite of the overall trend toward improvement of health and health care for Americans. This health disparity, reported in terms of "excess deaths" — deaths that would not have occurred had mortality rates for blacks and other minorities been as low as for whites — was found to have as major contributors:

1. Cancer
2. Cardiovascular disease and stroke
3. Chemical dependency as measured by deaths due to cirrhosis
4. Diabetes
5. Homicide and accidents
6. Infant mortality

This report by Secretary Heckler's task force states that the availability of well-trained health care providers to minority groups may be crucial in reducing disparities in overall health status, and that resources for minority health care may be less available than distribution statistics on health care services suggest. It also indicates that, although most minority patients receive health care from providers who do not share their ethnic or cultural backgrounds, studies have suggested that better communication between patient and provider, which has a positive effect on health outcome, may be possible when health professionals and their patients do have the same cultural background.

In only a few studies have the specialty choices and practice decisions of minorities been examined, but these studies tend to substantiate the beliefs that minority physicians, for the most part, return to their communities to practice and that they select primary care specialties in greater percentages than nonminorities. Published research includes studies of Howard University medical graduates by Lloyd and Associates and by Lloyd and Johnson, a study published by Koleda and Craig, and a study by Montoya and Smeloff of Mexican-American physicians trained in California.

A recent article by Keith and Associates in the New England Journal of Medicine presented further evidence, based upon a statistical evaluation of medical school graduates in 1975, that a larger proportion of minority physicians are contributing to the health care of underserved and minority populations. This long term study by Keith supports the concept that a large proportion of minority physicians are addressing the societal problem of health disparity through their practice patterns and patient populations they serve. This trend seems to still be continuing. The 1984 AAMC Medical Student Graduation Questionnaire revealed that 59.7% of minority graduates planned to practice in a socioeconomically deprived area, whereas only 14.2% of other graduates planned to do so. Similarly, the 1985 AAMC Medical Student Graduate Questionnaire revealed that while 54.7% of these minority graduates planned to practice in a socioeconomically deprived area, only 13.4% of "others" planned to do likewise. Specifically, 57.7% of the Black graduates and 54.2% of the Hispanic graduates planned to practice in a socioeconomically deprived area. Almost 80% of the non-minority respondents said that they had no plans to practice in a socioeconomically deprived area.

Another area of concern is that of minority faculty. It is difficult to provide visible and adequate role models for minority, as well as non-minority, students when only 2.9% of medical school faculty are minorities, and this figure has varied only by tenths of a percentage point between 1975 and 1985. During this period, underrepresented minority faculty declined in all basic science departments except Microbiology. The percentage of minority faculty has grown only 1 percentage point over the last ten years, with actual reported numbers of 1,097 in 1975 and 1,444 in 1985. There continues to be a need to provide more minority educators and administrators for our educational and training institutions.

Many ethnic minorities have faced the real or perceived restrictions on career choice and graduate medical education programs. Also, medical educators and administrators often have difficulty trying to increase the number of minority members in academic positions. Graduate medical education is an important factor in preparation for medical careers and in career options.

Data on the participation of minorities in graduate medical education are sparse and incomplete, as are data on their specialty selection, the reasons influencing those selections, the extent to which access to some areas of graduate medical education is restricted, and the degree of participation of minorities in academic medicine and medical research. The data that exist, combined with anecdotal evidence, indicate that the number of minority physicians practicing certain medical specialities is small, and as indicated above, the representation of minority physicians in research and academia is also strikingly low. Anyone who has engaged in efforts to recruit minority faculty must have experienced first-hand evidence of the low representation of minorities in these areas.

During the past 10 years, 50 to 60 percent of all Black residents have been in postgraduate training programs in internal medicine, pediatrics, general

surgery, or obstetrics and gynecology. Blacks and Mexican-Americans are overrepresented among U.S. graduates willing to serve in deprived inner-city areas. Although numbers are not readily available on the minorities actually practicing in each medical specialty, minorities are continually being encouraged to enter primary care fields and return to their respective communities. A need may well exist there, but consideration should also be given to the need for minorities to enter other specialty fields besides primary care, not only for the sake of minority patient populations with their varied health care problems, but also so that there can be a greater representation of minorities on medical school faculties, where they can serve as role models in academic medicine.

An argument sometimes used to justify increasing the number of admissions of minorities to medical schools has been that members of minorities are more likely than other medical school graduates to practice primary care medicine and to provide health care to underserved minorities and inner-city populations. A side effect of this argument has been that admissions committees often have not seen the importance of admitting a minority applicant to medical school unless the applicant's stated goals were primary care and community practice. We must make certain that those who determine access to medical education and graduate medical education are cognizant that minorities are needed in all aspects of medical and health care, including academic medicine, clinical research, and laboratory medicine.

In addition, further study is needed to assess the impact of changing health care economics — especially the reduction in federal support for health care for the indigent — on the continued viability of primary care practice in medically underserved communities that contain a substantial number of uninsured patients as the major practice pattern for minorities.

All predictive studies suggest that Black and Hispanic physicians will still be represented well below their percentage in the U.S. population in the year 2000 unless current trends in minority enrollments drastically change. In fact, the prediction is that enrollments for all minorities, especially Black and Hispanic, may fall below the last 5-year average by 20% by 1994.

There are ethical and social responsibilities for all of us to ensure that equitable health care is available to all segments of our population: the poor, the wealthy, the minority, the majority, the urban, the rural, all populations. The burden of minority health care is not just that of minority physicians.

In spite of the retrenchment in the governmental, community, and institutional commitment to furthering the cause of racial justice and affirmative-action programs, the health status of minorities should still provide an ethical impetus for medical schools to encourage, admit, and graduate minority students. It is time for medical educational institutions to reaffirm their commitment to addressing the inequities in access to quality health care.

As Dr. Carola Eisenberg states in her *New England Journal of Medicine* article entitled "It is Still a Privilege To Be A Doctor" . . . "Medical education does not exist to provide doctors with an opportunity to earn a living, but to improve the health of the public. Let us enlist our students in the campaign for equity and quality in medical care."

When considering such a statement, we must continue to remember the need for access to medical education and improved health care for our minority and underserved populations. AHEC, through its bridging activities, has made valuable contributions to this need in the past. We must all ensure that AHEC programs continue in their purpose and effectiveness to guarantee that the American Dream for the 21st Century is not just a dream, but a healthy reality.

Ms. Tsutsumida

Our next speaker is someone who is part of our AHEC family; someone who looked at a part of the country that is under-served and said, "This is going to be my home and I'm going to help improve it in every way I can." She started as a community leader, she worked with the Regional Medical Program, and she eventually got entrenched in the bureaucracy of Texas Tech University. She serves on the Texas State Board of Education. She has become a spokeswoman for women and for Hispanics in Southwest Texas. In fact, she is one of those very, very esteemed women who was named to the Texas Hall of Fame, the kind of honor shared with former Congresswoman Barbara Jordan of Watergate fame. But to us, she is AHEC's Corazon. I bring to you now, Maria Elena Flood.

Mrs. Maria Elena Flood

Today, everyone is building bridges. Here today, we in AHEC look at our program and find that we have a national charge to build bridges from data assessment to action. Throughout the country, those in public education and higher education are all building bridges — from the classroom teacher to the parent, the administration to the teacher, the administrator to the board of trustees or board of regents, the whole education system to corporate American, and of course, to legislators, state and federal. Even in this hotel, there are bridges to get us from one area to another.

But what real bridges are we building to answer one of the greatest issues this country has faced in many a generation? What bridges are we building to answer the problems of the burgeoning Hispanic population? Allow me to elaborate on what this growth represents. While the total U.S. Hispanic population is expected to more than triple by the year 2080, Hispanics 65 years of age and older will see their numbers multiply by a factor of 14 within that period. The U.S. Census Bureau projections of Hispanic population growth from 1982 to 2080 are overall Hispanic population growth from 17.3 million in 1985 to 59.6 million in 2080. Last year, 885,000 Hispanics were 65 years or older. By 2080 this group will increase to 12.1 million — with me included! Today, 5% of all Hispanics are elderly; this will increase to 20% by 2080. Even without immigration, the Hispanic community will grow at more than twice the rate of the general population — that's correct — without immigration! Therefore, we must dispel the notion that Hispanic population growth is due primarily to immigration. Some of us just have more children than others. Our rate of growth is now 6% and the Black population growth rate is 2%. And, whereas, the Hispanic median age today is 24, by the turn of the century it will reach 28, by 2030 it will be 33, and by 2080 it will climb to 40.9 years of age.

Who will we be by that time? Will we be the same as today — 43% high school dropouts with low paying jobs and a continuing lack of general well being? Or will the general educators face their challenges and bridge to our families and help them to help their children benefit from education and become what we lovingly call mainstream America.

You've seen the dropout crisis propagated all across this nation. Everyone is expressing concern. I'm telling you that the worst situation is the Hispanic. Dr. Pinn-Wiggins has told you that you have a low registration and enrollment of Hispanics and all minorities in medical schools. In 1984, we graduated over 16,400 medical students in this country, and out of these, native Mexican-Americans from this nation, born and reared here as I was, represented a grand total of 264 students in the entire United States of America. Dr. Pinn-Wiggins also tells you that a 1984 survey, the Hispanics and the Black's said, "I'm going into primary care, and I'm going to practice in under-served areas." And she told you that that seems to hold true. But, you know, what impact is 264 Mexican-American doctors going to have in a burgeoning population of under-serviced people in this entire country?

And how do we plan to answer the charge of medical, nursing, and allied health professional education — not only of minority students but of all health care professionals — to care for this particular population?

In our efforts, are we bridging to the reality of the patient population of our nation's future? Yes, we are trying! But where are we teaching? In traditional first generation AHEC community settings. That's great, but is it appropriate for third — and even possibly fourth — generation AHECs?

With the increase in complexity of our educational problems and the reduction in resources, I believe that in order to be successful, we must develop and employ alternative patterns of linkages. There is a clear need for innovation again!

Innovation is sometimes described and dramatized as a powerful disruptive force that shatters the status quo. And so it is sometimes. But undue emphasis on its disruptive character can be misleading. Historically, the status quo in human societies has been threatened, not by innovation, but by familiar crises: failure of food supplies, disease, and now in our world — superior market competitiveness. The image of innovation as a shatterer of a serene status quo is particularly inappropriate in our modern world. In today's world of rapidly changing technology and social change, status quo is elusive. The solutions of today will be out of date tomorrow. Somehow, institutions resist innovation much like children who fear the doctor more than the disease. If we, today, fear challenging our professional education systems to bridge to clinical settings that just a few short years ago would have been considered unacceptable, then we are like children.

We must produce not only minority professionals, but we must teach all professionals the reality of the Americans of the twenty-first century.

Traditional ways of integrating generations and ethnic groups into the mainstream are under great stress in our country today. Are we part of the stress? Are we not facing reality in integrating our health professionals to what appears to be our future? Our future is dependent on the availability of health care systems that are responsive to the comfort zones of the people. Community health centers and rural health centers are overflowing!

We must become the instigators of health care delivery to assure that we have settings in which to educate — settings which prepare medical professionals with vision, initiative, and compassion — men and women who are moved by society's ills and will get involved in their remedies.

That, to me, is this country and we in AHEC must participate. Ambulatory care is our new by-word!

Wellness/preventive medicine/health education — AHECs are the ideal formula for leadership in facing reality. Yes, our charge is education, but also I see us as the key to the development of health care delivery where in the past none has been available. Thank you.

Ms. Tsutsumida

The next speaker I'm going to introduce is my boss — a person who has become a very, very good personal friend of mine as well as a person who is quickly gaining a reputation among those of us in public health services as "a doer." I'm not going to say anything about his background because we don't have the time, except I'll say this much — his mother and father paid for a Harvard education and I think we should mention that. Other than that, I would like to say that any white male who has never had any claim to being a minority but who is willing to follow Dr. Pinn-Wiggin's and Mrs. Flood's act has all my sympathies.

Dr. Donald L. Weaver

A lot of people wonder why I am in uniform today. Clearly, with bridges and water, I went out to rent a costume. On the serious side, I am very proud to be a commissioned officer in the U.S. Public Health Service, and I think most of you know from Dr. Koop, who is our Surgeon General, we are in the process of revitalization. I think you will see more and more of us in our uniform.

Now to a more serious topic, because I think the issues that are discussed today certainly bear consideration and deliberation by all of us. I'm always hesitant when someone introduces me as a member of a panel of experts because I honestly think you have heard from the two experts. I don't know how I could, in any way, shape, or form, give you a more graphic picture of some of the concerns that I think are before all of us in this country. Certainly, Dr. Pinn-Wiggin's dream is one I share as well, and I think that many of the people in the Public Health Service and in the sectors that you deal with certainly try to share that dream, despite some obstacles which, at times, seem to be incredibly insurmountable. I certainly thought that Mrs. Flood reminded us that we are not the only bridge builders. I would submit that some people building bridges may not have the same intent that some of us trying to build bridges do, and may be going in directions that we are not very comfortable with. I think there would be a tendency to be very discouraged because the task before us is an incredible one.

As I thought about that, I harkened back to the audiovisual presentation by the University of Arizona today and was reminded that each of those stones was numbered. That bridge was not built overnight; but stone by stone, and piece by piece, they put together a structure that is working very well for them. I think we ought not to forget that. Although we have a long way to go, we've got some excellent builders in this audience, some of whom have an incredible track record and still need to go further, and some who are just starting on that bridging task. But, despite all the problems, there are reasons for optimism when people such as yourselves can get together to charge their batteries, which I feel meetings such as these do.

Rather than make some direct response to comments that need no response, because they are right on target, I would like to share a few thoughts with you. Number one, I would like to do something that we don't do very often in government, and that's to thank each and every one of you for what you do. You hear from us a lot, and certainly that was alluded to by the second presentator, Mrs. Flood, about how we talk about various and sundry things you haven't done or haven't met. Rest assured that the efforts of people like yourselves are appreciated, certainly by us, because you make reality out of what is a piece of paper in legislation to us in Washington. More importantly, it is appreciated by the people you serve, which is the audience we are all dealing with.

I think that bridging is an appropriate term, and I like the fact that this particular section made it a verb. For a number of reasons, it's an action word and this is an action group. Bridges are things that go from one place to another; they are based on a solid foundation. They are tasks accomplished by a team of individuals, each with some unique skills who work together to make something happen. It's not just people who put the mortar there, or somebody who put the stones together, but it's a group of people doing that. Bridges come in all shapes, sizes, and forms, and I guess if you are in the economy of today, one thing that is nice about bridges, you don't build them longer than you need them. You get from one place to another in the most efficient way you can, and you do that by building those bridges.

I've had a wonderful opportunity over the last 5 months. That's how long I've been in the Division of Medicine, so I'm a veritable veteran now at this point and I can't plead I don't understand the system anymore — I have visited three Area Health Education Centers over that period of time. At two of them I was actually a pinch-hitter for someone else, and I was pleased they weren't able to make it because it's fun for me to meet with all of you on a more personal basis than I have a chance to do at some meetings. And I've been impressed by a number of things, and I think they are encouraging stones as we put those bridges together.

One of the things on my visit to California was some literature that Cherry and her staff are very good at preparing for me so that I have some ballpark idea of the things you all do and at least some questions I'm able to ask. There was one report on the issue of AIDS, which is a concern to all of us and certainly a major concern to people in California, a state with two areas who have a large number of individuals who have that illness. There was a statement in there, three words that I thought were very important. It said, "People Have AIDS." I think that, all too often, in this tremendous concern and talking about a lot of the issues around AIDS, some people forget that. People have AIDS. That's something I feel the AHEC program hasn't done, and I would encourage you to continue to do — it is a people program. It's an educational program for people and helps those people serve people who are not as fortunate as we are in having access to health care.

I was also impressed during that visit to California with the presentations of the HISMET program in talking about their attempts to address some of the access issues for a minority populations, in that particular instance, the Hispanic population.

I had the good fortune of getting to Northwest Ohio a little bit early so that Ken Proefrock and I could drive out to Bryan, Ohio. For those of you who have not been there, they claim it's the real White House. That's the home where students stay when they visit the community. I saw an example of how successful you can be in getting local providers for an AHEC and how exciting it was for the providers and students as we sat around lunch together. We also saw a group of individuals who are very good at educating their Legislators about what the AHEC program is all about.

Most recently, I had the opportunity to go the state AHEC meeting in Charlotte, North Carolina. It was very interesting because, as I came into the airport, I mentioned to the woman who was kind enough to pick me up, that the gentleman who was in the lobby looked a lot like he could be Tom Brokaw's brother. He wasn't, he was actually Tom Brokaw. You can imagine my disappointment to find out he was there to go down to Heritage Village and talk about the PTL rather than to come to the state AHEC meeting. Unfortunately, I think that is perhaps a commentary on what people consider important and perhaps where the real issues are, as we deal with the future. But it was an interesting time for me as I had a chance to spend an additional day with the people in North Carolina and learn a little bit more about a state that has an incredible commitment to the AHEC program. In fact, I thought it was very nice of them to invite me to speak, considering the fact we are only .4 of 1% of their entire budget, so clearly we play a very small part in their operation. I was also impressed with the track record of their rural residency programs in keeping people in those areas, an enviable track record that I would encourage people to emulate because I do believe in imprinting. I do believe in role models. People who can see viable opportunities in those areas where we are educating will at least consider one of the career opportunities in going into those areas. I actually believe that whether they end up going there, go into private practice, or become faculty members, or doing whatever they do, they are better human beings and better people for the experience. They are going to treat their fellow man in a different way than if they had not had that kind of experience.

Although I have used specific examples from three different places, I guess my encouraging feeling is that these are the tip of the iceberg. You are out there doing that across the country and you ought to be complimented for that. It's certainly my way of saying thanks.

What about the American dream? We talked about that. We said we were bridging toward the American dream. I think a lot of people are concerned about what the American dream is, and I'll pick one aspect of it — health care. You've already heard some of the statistics. I don't know how one would describe them. For the 3 ½ years prior to coming to the Division of Medicine, I was involved with the Community and Migrant Health Center's programs. At the number of places I was able to go and see, I said, "If you could take pictures of these places and put them in an album and ask people where they were, I defy people to tell me that they were in the United States of America." There were conditions that are unbelievable, whether they were living conditions, or whether they were the colonist down in South Texas, or whether it's down in Belleglade, Florida (which happens to be in Palm Beach County, but nobody would ever guess that's the case from those pictures.) Consider the amount of time that the individual health care teams and providers were spending with individuals on conditions that were very easily taken care of in advance. We talked about prevention by just having potable water and decent sanitation. I guess it's an embarrassment for the country and it's certainly an eye-opener for individuals who have not been exposed, as you have been to those types of situations.

I think people are concerned about it. The most recent report was the Robert Wood-Johnson Foundation's special report called "Access to Health Care in the United States, Results of a 1986 Survey." All of you have a copy of that in your in-box, as I have, and the opening line says, "In the midst of dramatic changes in U.S. health care, Americans generally report satisfaction with the care received. However, for those who traditionally have trouble obtaining care — the poor, the minorities, and the uninsured — these changes have not spelled improved access to services." Another group is the Seventy-Second American Assembly, which was established in the 1950's by then past-President Dwight D. Eisenhower at Columbia University. The purpose of the American Assembly is to bring together people of different outlooks, affiliations, and political beliefs to reach consensus opinions. And they say, "All Americans should have access to quality medical services, even in today's health care environment." They go on to say, "Not providing for those who need it should be unacceptable in any rich society committed to decent and humane care for all its people." I guess that sums up my dream fairly well. Its the sort of thing that everybody has been talking about, and that is access to equitable services.

Will there be some tough issues to face with respect to that? I'm sure there will be. It's a traditional balance between education, research, and teaching. It's the question, "Can we provide everything to everybody?" I think the answer to that is probably a factual - NO. But it's dealing at the wrong end of the spectrum from my perspective. Is there a minimum level of care below which no one should drop, which should be available to everybody? That seems a question we are willing to talk about a bit, but we are not willing to deal with it on a comprehensive basis. So we have to do it stone by stone, piece by piece.

When I read about groups like that, two very esteemed groups that are talking about it, and when I hear the speakers this morning talking about the same issues, I wonder, "Why don't we act? Why do we have to do it piece by piece?" I'm sure part of the excuse is finances. Part of the

excuse is lack of concern. Part of the excuse is not knowing that it's the problem that it is, because I think we are suffering in many respects from the "me-generation" and not worried about other individuals. I guess I also feel that, in many of these instances, perhaps there is a lot more tinder out there than we give the country credit for. What it is waiting for is a spark, and the sparks are people like yourselves. I know, because its been posted on the blackboard of the meeting I went to yesterday.

Also, for those of you who know me, if I didn't talk about some sort of sports analogy, you would go home disappointed. Certainly Cherry would. I would like to talk a little bit about a gentleman who is now a Senator in the United States. At the time that John McPhene wrote about him, he was a basketball player at Princeton University. Maybe I'm partial to him because he grew up in Crystal City, Missouri, which isn't too far from where I grew up. And of course, I'm talking about Bill Bradley.

The title of a series of articles that actually became a book, is called, "A Sense of Where You Are." I think a quote from that book is very interesting. It says " 'When you play basketball for awhile, you don't need to look at the basket when you are close like this,' he said throwing it over his shoulder again and right into the hoop. 'You develop a sense of where you are.' " Every good basketball player (and I'll use that analogy just a little further for a second) who is a really good basketball player, we'll say a Magic Johnson or a Larry Bird, knows where the other players are, knows who their teammates are, and who their opposition is, and knows where they've been and where they're going. They do have a commitment and they are leaders.

I don't think we have to be too creative to talk about you as having a sense of knowing where you are. That's what's made the AHEC program the success that it is. I do have a feeling that you do know who the players are. You know where you are going, and it's very easy to use the action verbs with you. You are interested in bridging, you are interested in caring, you are interested in sharing, and most importantly, that's why we need the challenges from the speakers this morning — you are interested in daring. You are willing to provide that spark, but I'm not exactly sure what that spark is. I think in general, a lot of times, its a little bit of imagination. It's not willing to accept the idea that that's not how we've done it in the past. And you've certainly heard that before, with respect to some of the challenges in the educating of health professionals.

This meeting is a time to dream. It's a time to use your imagination a little bit because I guess I'm convinced that this group is more than just one stone in those bridges. It's a large number of them and I think you can have a tremendous impact across the country. I'm convinced that, together, we can bridge some of those barriers to access health care, be they geographic, economic, or cultural. Will we be able to do all things for everybody? No, and that's a temptation when we talk about those global kinds of issues. But if we don't take it apart, piece by piece, it gets a lot like my in-box every Monday when I've been on the road for a week. It's looks awfully high and I get pretty depressed about whether I ever will get through it. But when I start to take it out, piece by piece and paper by paper, I can figure out what is important and what isn't. Once in awhile, I even can get a sense of where I am.

I guess, in conclusion, I am reminded of the individual who wasn't a Quaker, who went to a Quaker meeting. After sitting silent for approximately an hour, he finally poked the gentleman sitting next to him and said, "When does the service begin?" Very kindly the gentleman said, "The service begins when the meeting ends." I guess I would challenge you with this — while you're here, dream your dreams, plan your bridges — because when you leave this wonderful area and this wonderful commentary which is a chance to charge your batteries, your service begins when this meeting ends. And there's a tremendous number of people out there that are counting on each and every one of us to help with that service. Thank you.

Ms. Tsutsumida

Thank you, Dr. Weaver. I have been told that Dr. Beulah Allen has just arrived. I have some news for you in the audience. She has a right to be late

because her ancestors were in Arizona before our ancestors ever got here. I would like to introduce Dr. Beulah Allen. She comes from North-Eastern Arizona. She is a full-blooded Navajo, born in California, and her family relocated back to the Navajo nation when she was 2 years old. Dr. Allen is the mother of three children. She received her under-graduate degree from the University of Arizona and entered medical school at the University of New Mexico after starting her family. Please join me in welcoming Dr. Beulah Allen.

Dr. Beulah Allen

Thank you, Cherry, and I apologize for being late. I got here in only 2½ hours, flying down from the Navajo reservation. It's rather remote and it takes a long time to get here.

But nonetheless, I want to make a few remarks about AHEC and what I think is a program of tremendous value. I also have to say that although I was not at first accepted at the University of Arizona, I did graduate from there, and I'm very happy I did graduate from the U. of A.

I'm back home where I want to be, practicing as an internist, and in my part-time I take care of my three teenage boys and do some parttime ranching. It's 60 hours a week at the hospital and all the rest of the time that I can spend at the other things. It's very demanding. I'm a single mother and my kids take full advantage of it.

In order to tell you about what I think AHEC can do, I need to give you a little bit of background. At the time I grew up on the reservation, it was incredibly remote and my mother was a nurse, the first RN that graduated with an RN degree among the Navajo people. She worked at the medical center where I now work. It was the only hospital at that time, and people came from hundreds of miles to seek medical care at that great institution. Next year, we are going to be doing heart transplants. (That's a joke.)

I will say that we have a 45-bed hospital. We have an outpatient clinic that is extremely active with 13 doctors who cover a population of 22,000. We have 80-some adult outpatient visits a day and an equal number of pediatrics a day. Our intakes and service is 22 beds and 2 intensive care units and it is full most of the time. That is just internal medicine and we turn our beds over very quickly. The people I work with are dedicated and wonderful people, and I'm the only Navajo, the only Indian doctor there, and I'm also the only doctor who speaks the language. We have a total of about 15 to 20 graduate medical doctors, and the majority of those practice on or in the reservation with the Indian Health Service. Many of those people do not speak the language. We have a very educated battery of Navajo medicine men who have studied long years to become medicine men, equally long years as those of us who are doctors. Just before I went back to medical school, I joined a small organization called the Navajo Health Authority. I helped to establish the emergency medical system which now is still in operation on the Navajo reservation. It was the first, and the only, emergency medical service established there.

Prior to that time, people had no emergency training, and those that were injured on the highways, of which there were a great many, were put in the back of a pick-up truck or put in the back of a police van and were brought to the medical facility. Of course, many of those people did not survive. We're very proud that we were able to establish the service through a number of different organizations' funding and through a great deal of teamwork. We're also proud that through the Health Authority, there was an attempt to establish a Native American medical school. That has more or less gone by the way; however, we do have an excellent library which is available to one and all. There was also a very active educational program in which students were able to chose their own field. We had a number of high school students go to college and then practice on the reservation and be paid by the AHEC for working there.

It's very important, I think, for people who are Native Americans to be able to study and work in their own community, and I am very grateful, personally, to be back in my own community. It's where I grew up and where my family is and where I can bring up my children in ways that I think are very important.

In our childhood, 30 years ago and before that, the only means of education for young people were the Indian schools. Many of the kids were taken away when they were sick, away from anything that they knew, taken totally off the reservation system as babies. They were told that they couldn't speak their own language, they couldn't wear their own clothes, and they were given food that was alien to them. When they spoke in their own language, they were spanked, punished, rejected, told they were no good, and there were a great many fights that broke out among the Indian people themselves over posi-

tions. A friend of mine told me, not too long ago, that when he went to school the first time, the very first thing that happened was he got into a fight. It was a fight from then on.

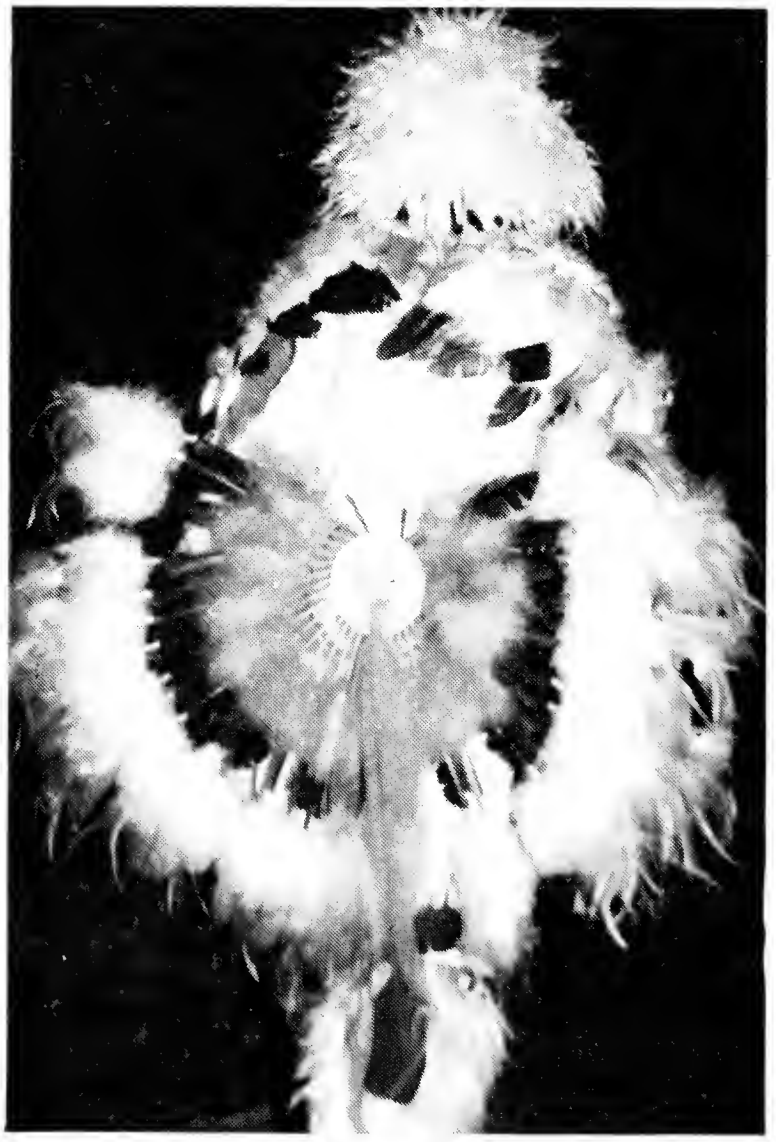
If you take children like this, and put them into alien environments and teach them by physical, brutal means that they have to change, then they are not going to want to go back to school. I think that attitude has continued to the present day. We have a large dropout rate, and we have a lot of people that don't want to come out and mix with the rest of the world because they are afraid and because they know the stories. When I started high school, I traveled to California every August and would come home in June. I was the only Indian in California. I lived for the time when I could come home and be with my own family. When I started at Arizona State College, there were six Indians; one was my brother and one was my cousin. Then I entered the University of Arizona and there were 24 of us, half Papagos, 1 or 2 Hopis, 1 Sioux, and we helped each other. We supported each other in getting through school. Now there are hundreds. I was the guest speaker at a meeting in New Mexico, and there were a dozen or so engineering students graduated. For the American Indian in today's society, it is so good, it is just beautiful. They had not known the difficulties that many of us that were older had known. They had been able to go and be educated in their own communities, and they have all the environment and values that are taught among the Indian people. But those that were sent away were taken away from that.

We have now a whole generation of young people who do not speak their own language and who are not able to converse or communicate with their grandparents. These are tragedies that should not be allowed to continue. And if we can have education in our own communities and if we can go to school and study with our own people, then I think we would be far better citizens for it. I think that the balance of society has done wonders to educate its young people. When I started college, I was one of 12 kids who got scholarships that year, and it was one of the first few years that scholarships were available. Now there isn't enough money to provide scholarships for all the young people that want to go to school, and this is something that our people have done ourselves. If we can get a little extra help, then we can get some health education money to do the kinds of things that the Health Authority did when I was working there. I think that would be a tremendous benefit, not only to us, but to all of you as well.

Out of that small group of people at the Health Authority, I became a doctor. The other administrator became a doctor. She is now working with John Hopkins, doing research, and has just finished developing an oral dehydration program for infants. The executive director of that organization is now the area director for health services of the Indian Health Services and his first assistant has his Ph.D. in Public Health. We have an emergency medical service; we have a library; we have two state senators, one in New Mexico and one in Arizona; and we have people who are not Indians that got their PhDs with that program. I think that's a lot to say for a real small program, and I would like to see that kind of effort continue.

I don't mean to go on with all of these terrible stories, but you should know that education is something that this country needs for all of its people. Some of them have to work very, very hard for it. It's been an experience, and I don't think that everyone needs to do that. I'd like to see my children and the children of all my friends and relatives be able to have free access to education in whatever field they want, without having to really sacrifice a great deal. I would encourage the efforts with the AHEC here in Arizona and to all minority groups. I feel that individual personal interest in me resulted in my finally getting into things that I wanted to do.

I hope you have a very fine conference. Thank you very much for inviting me.



PLENARY SESSION:

THE SUPPLY OF PHYSICIANS FOR THE U.S.: THE NATURE OF THE PROBLEM

Thomas J. Kennedy, Jr., M.D.

As recorded in Ecclesiastes: "To everything there is a season and a time for every purpose under the heaven."

The question I propose to examine today is whether this is the time for something to change with respect to the supply of physicians for America. I presume that the reason I am paired with the distinguished Dean of the University of Arizona School of Medicine is because he represents the institutional form — the Medical School — that controls the production of physicians, perhaps the most critical determinant of their prevalence.

When Dr. Petersdorf, for whom I substitute today, assumed the Presidency of the AAMC last September, he decided that one of the issues he wanted to explore at an early date was physician supply. Accordingly, several members of his staff, myself included, started to scramble to get educated about an issue somewhat unfamiliar to us. Today's talk is a progress report on what I've learned in the last few months.

The almost universal perception in the 1950's, that there was, or would soon be, a shortage of doctors of a growing America, stimulated explosive growth beginning in the mid-1960's in U.S. medical schools to train physicians. Without any centralized planning and with virtually no central control save the quality standards of the Liaison Committee for Medical Education (LCME), an uncoordinated, undirected, exuberant, multifocal, occasionally entrepreneuial, expansion took off. By the time that it had run its course — almost ten years ago now:

— Forty-six new medical schools, most of which were public, had become fully accredited;
— First year places, in new as well as in expanded schools, had more than doubled, with about 70% in public schools;
— Graduates had more than doubled;
— The attractiveness of medicine as a profession was reflected in an enormous increase in applicants, that peaked in academic year 1974-1975 and subsequently declined;
— The number of active physicians increased absolutely as well as in relation to population.

In summary then, by the mid-1970's, within little more than a decade, the national capacity to educate physicians, indeed to educate health professionals of all types, had been strikingly expanded, and the swelling graduating classes were beginning to enlarge the practice pool. When the Federal Health Professions Educational Assistance Act was renewed in 1976, its preamble asserted flatly that the country no longer faced the prospect of a physician shortage. The emphasis in the new law shifted to the unsolved problems of the distribution of physicians by specialty and location and the influx of FMG's, both U.S. and alien.

In 1976, the Secretary of the Department of Health, Education and Welfare appointed a committee, the Graduate Medical Education National Advisory Committee (GMENAC) to examine, inter alia, national needs for physicians by specialty and location. Four years later, this committee's report included the somewhat unexpected conclusion that, if physicians continued to be produced at the prevailing rate, their number would exceed the estimated need for them by 1990 and thereafter in all but a very few fields — General Psychiatry, Child Psychiatry, Emergency Medicine, Preventive Medicine and Hematology-Oncology.

The GMENAC report had a relatively minor impact, principally, in my opinion, because it relied so heavily on a notoriously difficult assessment: the needs/requirements for physicians. Certainly the GMENAC recommendation that medical school enrollments be reduced by 17% relative to the 1980-81 entering class did not, in fact, occur. Moreover, the prevalence of specialization and subspecializations that GMENAC viewed as excessive persists despite a widely recognized need for a higher proportion of generalists and primary care specialists. One positive note, however, is that by 1979, a progressive diffusion both of physicians and specialists into communities of smaller and smaller size had become apparent.

Medical school applicants, first year enrollments, total enrollments, attrition rates and graduates have been carefully tracked for years. The trends in specialty selection are recorded by the NRMP while the Specialty Boards maintain records on their diplomats as well as those who achieve subspecialty recognition. Foreign medical graduates surface when they seek ECFMG certification or sit for licensure examinations.

The AMA, the AOA and the ABMS files provide information about the practice locations of physicians. Intergrating this with census data permits calculations of concentration of physicians, by speciality, in the population. Data files constructed for specific studies have yielded information about physician careers: migrational patterns, deter-

minants of choice of practice location, shifts in type of practice. The heightened interest in modelling physician supply has led to the creation of a comprehensive data file on the age and gender structure of the pool of active physicians that is periodically updated for accessions to, and retirements from, that pool. Empirical data on variables such as average career duration can be derived from this file.

One property of the physician supply process warrants special attention. It is that the number of physicians in the population cannot be changed quickly: this year's pool size is equal to last year's, a very large number, plus this year's new MD's, minus this year's retirements, both relatively small numbers. The pool dynamics have, as the engineers say, a long time constant.

The ordinate in these two graphs is the head count. To the extent that life-style changes result in shorter hours, longer vacations, etc., the number of full-time equivalent physicians will be less than the head count inscribed in these curves.

But even after these carping footnotes, the size of the steady state pool that is inevitable if current trends persist is very impressive. It suggests that the relevant question is not "Is there a surplus of physicians in 1987?", when the country's physician population is 514,000, but rather "Will there be a surplus of physicians if the current rate of physician production continues until the process reaches a steady state?", i.e., until retirements from the pool equal accessions to it.

One more illustrative consequence of the inertia of the pool size may be informative. Using the same model, and again retiring physicians at age 65, we projected the changes in pool size if aggregate medical school enrollment were reduced more or less immediately to a level that would result in attaining the steady state number of physicians, 470,000, recommended by GMENAC. To do this through reduction of entrants would require a contraction of about 25% in 1st year class size, a trauma so severe to medical education in the U.S. that we decided that it could not be accomplished unless the 3,000 FMGs that presently enter the pool each year were also eliminated.

Note that the drastic step modelled — an immediate 25% reduction in 1st year class size and total FMG elimination — indeed slows the growth in pool size but that the latter still continues to expand until the year 2004. After a moments thought, the general form of this curve should not come as a surprise. The 65 year old physicians that our model retired this year entered the pool when the annual number of medical school graduates was averaging about 6,000, still well below the steady state level of entrants/graduates for the modelled pool size. As long as attrition from the pool is less than accessions, growth is inevitable.

These pool dynamics seem to me to lend some urgency to coming to a decision and acting on the problem before us.

Data on the magnitude of the need for physician services — the illness burden of the nation — exists in many forms in many places, but a comprehensive central respository of information collected under uniform, nonredundant, comparable criteria and standards that would allow data pooling is a long way from realization. Estimates of incidence and prevalence have been published by many specialty societies and can be found for most major diseases. Estimates have also been made for how much physician time is required to manage this burden of illness, how the responsibility for management should be distributed between generalists and specialists we well as between physicians and non-physician providers, and what constitutes minimal, normal or optimal management. More concrete indices of minimum need come from the experience accrued in managed care systems. The service load experienced by large HMO's reflects the incidence and frequency of disease and disability in enrolled populations of significant size and known socio-economic character. Moreover the supply of physicians, by specialty, actually used to meet the workload, is known, and when combined with professional judgments on the quality of the care rendered, is helpful in interpreting the meaning of need and in predicting the outcome of marginal changes in personnel.

Data of variable amount, reliability and relevance about the demand for health services also are available. Trends in national and regional health care expenditures, and in health care prices are monitored in detail. The prevalence and character of health and hospitalization insurance coverage are systematically tracked. Reasonably reliable estimates are available of the size of the population of medically indigent and hear-indigent. Data on hours worked by physicians, presumably related to demand for services, is also collected. Finally, anecdotal evidence suggest fluctuations of demand with economic conditions; people whose income suddenly falls often defer, sometimes indefinitely, health services they could be said to need.

Within the last decade, increasing attention has been devoted to the collection of data, usually through ad hoc surveys, on the perceptions of patients and physicians on questions such as: personal satisfaction derived either from specific encounters or from overall experience with the health care system; access, measured by physical

proximity to sites of service, convenience of hours, waiting times; and perceived quality of service.

I hope this recital persuades you that, in the aggregate, the amount of data — and, for many sets, its projections through modelling techniques — is very large. After appropriately discounting the softness of some of it, particularly that related to requirement/needs/demands, it should be possible to gain at least a semi-quantitative sense of the balance between the current and prospective supply of physicians and the need/demand for them.

But agreement on the facts is a long way from agreement on the meaning of those facts and on what action, if any, that they require.

The central issue is how many physicians are enough to meet the nation's health service needs. The operational word is **enough**. Physicians, patients, and insurors — to mention just a few of the groups with a vested interest in the problem — may each have distinct and different criteria for "what's enough." Physicians' perceptions may relate to how busy they are, to their incomes, and/or to their free time. Patients may see the issue primarily in terms of how expensive and how convenient it is to get care. Insurers such as Medicare may focus on cost, coverage of the beneficiaries, acceptance of assignment. If demand is likely to fluctuate with the ups and downs of the nation's economic prosperity, is an adequate level of supply defined for peak demand, minimum demand or some yet to be specified intermediate point? How can a specification of "how many is enough" take into account the way the actors respond to an evolving environment? How will physician behavior change with changes in competition, regulation, personal autonomy, professional satisfaction, income and practice settings? How can account be taken of the effect of changes in the affluence of the society on alterations in expectations for health care? How can prescribing the adequacy of supply foresee the responsiveness of insurers and payors to the market forces by which they are buffeted?

The reliability of estimates and projections of requirements/needs/ demands, soft at best, is also overlaid by similar, perhaps redundant, questions of the meaning or significance of the facts. Demographic trends are unpredictable and often capricious, technological breakthroughs such as those that obsoleted polio and tuberculosis are unforeseeable, calamities such as AIDS cannot be anticipated, anymore than can be the recent inexplicable decline in coronary heart diseases. Physicians are not robots or automata and their productivity is elastic. One can only guess at the directions and extent to which physician productivity will respond to major changes: in delivery systems — the prevalence of managed care; in competition between physicians for limited pools of patients; in competition between physicians and other health professionals; in the extent to which feminization of the profession continues; in personal satisfaction from professional practice; in expectations of physicians for different lifestyles. Need projections could be seriously confounded if patients were to demand different degrees of personal fulfillment in their encounters with physicians, of access to health services, of quality of care.

It seems apparent, at least to me, that the most crucial questions related to balancing the supply of physicians to the needs/demands/ requirements of society are not only factual and data based: they are also heavily ladened with values, perceptions, expectations, aspirations, and so forth, on which the opinions of equally reasonable people are strongly held and widely divergent.

The ideological context for discussions and debate ranges widely. Free market advocates would simply let manpower supply respond to services demand. Not clear, under this policy are: how the indigent, with need but without the wherewithal to make demands, would fare; and how the system could respond in a timely fashion. Medical school enrollment would presumably fluctuate according to the perceptions that potential matriculants gained of the future marketability of their services. A free market ideology basically well characterizes the control of physician supply in the USA today, and is consonant with the free enterprise value of a society that has outlawed monopolistic practices and empowered the government, through the Federal Trade Commission, to guard against violations.

The polar position is that the supply of physicians should be regulated so as to approximate, as nearly as possible, the needs/demands/requirements of society for physician services. The problem with this position, however, is that in our society and under our form of government, no machinery exists to decide on the magnitude or the direction that adjustments should take and no formal body is empowered to take the action necessary to attain the goal. As noted earlier, the expansion of productive capacity of physicians — while stimulated and perhaps slightly modulated by incentives — was essentially unplanned, uncoordinated, undirected, multifocal, and entrepreneurial. If a consensus should emerge in the country on the desirability of some change, the latter must almost necessarily come about through the same undirected, uncoordinated and unplanned actions at many sites in the system.

The forging of a national consensus is not likely to come easily or without contention. The old story that one man's meat is another man's poison was never more apparent than in this area. What appears best for the patient, that is, what allows easy access, low prices, unhurried visits, and inferentially, better quality care is an oversupply of physicians. Patients, in the aggregate, constitute the society in which physicians must practice and whose respect our medical schools must earn. The situation may be perceived quite differently by physicians, for whom oversupply means underutilization of time and talent, disuse/atrophy of skills, necessity for undignified marketing activity and lowered socioeconomic status. The perceptions of society as a whole are more akin to those of the patient than the physician.

In summary, the issue of physician supply is complex. The question of whether the nation has too few, too many, or just the right number of physicians and whether its capacity to produce them is too large, too small or correctly sized, indeed, have factual dimensions. But far more important is how these questions are perceived through the noncoherent, non-congruent and non-consensual values that are dearly held by the many societal groups with a vested interest in the outcome. Thus, a wide range of views continues to prevail, although the probability that the persistence of current trends harbingers oversupply, in at least the long run, is gaining ever broader acceptance.

For corrective action, if needed, the best hope is that the multiple informed decisions, made locally in response to local perceptions will, in the aggregate, eventuate in a better balance between the supply of physicians and the needs and demands of the society for their services.

PLENARY SESSION:
THE EVOLUTION OF THE AHEC PROGRAM: BRIDGING OUR PAST WITH OUR FUTURE

Mr. Thomas Hatch

Good afternoon ladies and gentlemen. I'm Tom Hatch and I'm the Director of the Bureau of Health Professions in Washington. I appreciated all the kind remarks about the administration this morning, and I'm here to moderate this afternoon's session with a person whom you all know. I want to complete my introduction of him, even though he has been introduced once already today, and will probably be introduced again later this afternoon. However, I intend to use my prerogatives.

Clearly at an AHEC meeting, no one, least of all, Gene Mayer, needs an introduction. He is, in fact, recognized as the unofficial Dean of the Carnegie-Model AHEC. When I was asked to introduce the speaker, I welcomed the opportunity because of the personal respect and admiration that we all hold for him. One may not always agree with him, but no one will ever take exception to his integrity, his ability, or his commitment to better health and competent professionals. Our speaker is the Program Director of the North Carolina Statewide AHEC. He received his Bachelor's Degree from Tufts University in Chemistry and Biology. He received his Doctor of Medicine degree from Columbia University and his Master of Public Health degree from Yale University. According to some of his confidants, the most pivotal experience of his life was not academia, but as a Peace Corps volunteer assigned to Turkey.

He credits those times as the most formative years of his life, when he sorted his values, his attitudes, and his goals. Fortunately, for us, however, he did return and chose North Carolina as his home. As the saying goes, "the rest is history." North Carolina has become the flagship of the AHEC movement. It has the enviable record of showing that 79% of family practice residents stay in the state and, of those, 50% locate within a short distance of wherever they receive their community education. North Carolina conducts over 3,000 continuing education programs, with over 73,000 participants and 800,000 plus contact hours. I might add that they are doing this all now on state support. Of course, the importance that the Peace Corps places on community involvement in determining and meeting its goals is still a part of all he does.

Dr. Eugene Mayer

I am honored to have the opportunity to address so many AHEC staff and friends today. We have a proud past and an exciting future. This meeting will help us move forward with a shared spirit and common goals.

In preparing these remarks I could not help but recall the first meeting of the AHEC project directors which was organized by the federal staff and held in St. Louis in May 1973. Originally there were eleven projects and each made a brief presentation. We learned two things at that meeting:

- First, that we had a lot to learn from each other.
- Second, that we should plan a certain number of meetings ourselves if we really wanted to share the substance of our work.

This led to the first National AHEC Meeting organized by the projects of all AHEC staff. It was held in Ashville, North Carolina, in May 1975. If my memory is correct, we have had at least six national meetings. This meeting in Tucson follows the pattern of organization and content of the preceeding meetings and continues, what I believe, is our tradition of excellent programs. We are indebted to Andy Nichols, Christy Snow, the entire Arizona AHEC staff, and the conference planning committee for bringing us together.

The value of these meetings has been significant to the survival of the National AHEC Program, especially when combined with what has been at least three meetings per year of the Project Directors since 1972. As one who has attended almost all of these meetings, starting with the first one, I believe the most important thing we have going for us is our confederation, especially as the confederation has evolved within a constant mission for the program.

Our mission has remained constant even though our specific activities and organizational structures are very different from state to state, from AHEC to AHEC in a given state, and within a given AHEC over time.

What has been our mission?

To answer this, I turn to the statement developed by the AHEC Project Directors in 1976. It reads: "The AHEC program is to provide community-based education and training programs for health care providers. It does so by linking the academic health science centers with community service agencies and practitioners. The vehicle for this linkage is a regional educational and training center called AHEC. The program's overall purpose is to improve the climate for professional practice in underserved areas so as to improve the recruitment, retention and quality of health manpower with special attention to primary care."

We have kept this mission secure by grounding it in various generations of health professions education legislation. However, there have been pressures to change our mission and they have come from several sources.

First, projects have occasionally wanted AHEC to become something else. The greatest internal pressures are for AHEC to become a program of public education or a program of clinical service delivery.

A second source of pressure to change has come from the federal government, which occasionally has tried to get us into other things. For example, once, we were asked to become a vehicle for HMOs and even to become peer review organizations.

Finally, a third source of pressure to change has come from evaluation groups that would effectively change our mission by evaluating us according to whether we were accomplishing things we never set out to do. For example, in the mid-70's we were presented with a protocol by such a group that planned to evaluate the National AHEC Program against changes in health status indicies, such as the incidence of diabetes in the community.

Although we have kept our mission constant, we have seen an exciting evolution in our programming such that those AHECs which have continued since 1972 are doing not only many of the same baseline activities, such as the decentralized education for medical students, but with the help of the special initiative section and state and local funding, have added other activities consistent with changing patterns of health status and health care delivery.

In my own state of North Carolina, we are not only doing extensive amounts of training for students and residents along with continuing education and technical assistance for practitioners in all health fields, but we have taken on special activities in areas such as aging, health promotion/disease prevention, and health services management. Meanwhile we are also building a parallel AHEC relationship with the mental health system of the state which is leading to the development of a network of teaching mental health centers which, in turn, brings programs to our most rural mental health centers. These are activities we never envisioned in 1972, but they are within our mission.

Our national track record is an excellent one, especially when viewed against that of many other federal programs from the late 1960's and 1970's. The most important statistic is not that so many of the original projects survived, but that significant state and local funds have been forthcoming in response to the federal AHEC catalyst.

We recently had the opportunity to present our case to the appropriations sub-committees in both the U.S. House and the U.S. Senate. There, we pointed out that this year's federal appropriation of $18 million dollars is enhanced by over $100 million state and local dollars for AHEC funding. In response, both Congressman Natcher of Kentucky and Senator Inouye of Hawaii, who speaking for Senator Chiles of Florida, indicated that we could expect to be proposed for an appropriation of $18 million for fiscal year 1988. Congratulations to each person in this room and our AHEC staffs back home who made this possible.

Some have asked if we can maintain a program like AHEC that depends upon partnerships and cooperation in an era wherein the watchword is competition and where educational programming and patient care strategies are increasingly computerized. With a dose of academic naivete, I say, "I wonder if we can afford not to retain our partnerships as we face this changing world."

What a tragedy if our universities reverted to the "ivory tower" and our community hospitals, service agencies, and practitioners returned to their earlier state of professional isolation. The distribution, retention and quality of health manpower could not help but suffer, with an ultimate negative impact upon access to and quality of health care for all citizens. And we would face a special negative impact on those groups of our citizens who are already disadvantaged and isolated.

Yet, my hope is an emotional expression. What do the realities of the trends in economics, health services organization, financing, and delivery, and health profession education and training tell us about our future? Or put another way, does AHEC fit the economic trend line?

At first blush we might blanch. Events seem to be stacked against us. I will choose four examples:

1. We hear that there are too many physicians. A surplus of physicians will mean reduced size and scope of medical education programs. It also means that there will be reduced interest in health manpower issues.
2. We hear that health care is too costly, which means we will see reduced reimbursements to providers, including those in teaching settings.
3. We hear that we have budget deficits, which will mean reduced support for training programs.
4. We hear that it is a world of institutional competition, which means reduced interest in partnerships, the stuff of which AHEC is made.

I believe that AHEC will not only withstand these pressures, but will strengthen itself and better serve society by recognizing that it is one of the few programs that functions to strengthen the health care delivery system even as the system is shaped by these trends. Let me elaborate. If I am correct, our future is wrapped up in our ability to survive the trends by responding to them with firm answers and good programs. Let me share with you some of my answers to these arguments. I welcome your challenge to these answers so that we might evolve the best set of answers on a national basis.

First argument: The physician surplus

When confronted with this issue, I point out that, to my knowledge, AHEC has not produced one new physician since its creation in 1972. This problem belongs to our schools and to our immigration policies and licensure policies. AHEC certainly helps give community orientation to students, but we need this orientation whether we have the same number of students or any percent of the current number. Therefore, so long as a community orientation is needed, who better to do this than AHEC?

When confronted with the argument that a physician surplus would translate into a lack of need for AHEC, I not only give the foregoing response, but I also quickly turn to the issues of distribution, retention and quality.

Few programs are so well placed conceptually or organizationally to offer systemic hope for improved distribution, retention, and quality of health manpower. This is even more true today with increased AHEC emphasis on minority and close cultural issues.

We must also keep in full view the fact that AHEC is not for doctors only, but addresses training, recruitment, and retention of all disciplines. One of the important things to do is to provide a support system for all types of health manpower.

Finally, to those who would close AHEC because of the supposed physician surplus, I point out that were AHEC not in place in my state, the return to an "ivory-tower" mentality would not only have negative consequences for medical student and resident training, but it would remove a vital source of continuing education and consultation for community practitioners. Ultimately, the negative impact on quality of care for our citizens would be substantial. Those who would link

AHEC funding to issues related to the supply of physicians are ill-informed, at best.

Second argument: Health Care is too costly, resulting in pressures to reduce hospital utilization and reimbursements to providers, including academic providers.

My response to this is unambiguous, as AHEC welcomes the fact that we are entering an era of greater emphasis on ambulatory care services. This service trend certainly presents tremendous challenges for medical and health profession education at my school, where we are in a major planning effort for more ambulatory medical education. And, not surprisingly, all signs point to AHEC as a major part of the solution. For example, just last week the Dean of the University of North Carolina School of Medicine, speaking for the other three deans in the state, indicated that ambulatory-based medical education and training was at the heart of the future curricula of all four medical schools. He then made it very clear that the schools could not do this without AHEC. Our contacts with health departments, nursing homes, mental health centers, doctors' offices, home health agencies, hospices etc. make us a logical vehicle for helping our academic centers survive in a changing world. Our role is certainly in synchrony with this trend and the pressures on our schools. We fit this trend line.

Third argument: Budget deficits

Of course, AHECs do require funds to operate, so in that sense, we are a part of the national problem. However, the $227 million spent on AHEC by the federal government since 1972 is about equal to what the Health Care Financing Administration dispenses every few days. Or put another way, who knows how many AHEC projects would fit in one B-I bomber? If my information is correct, our $277 million dollars would have built less than one B-I bomber. As Uwe Rhineheart, says, "The issue of budget deficits comes down to a matter of taste."

Fourth argument: We are in a competitive era which rejects cooperation.

I have heard it said that a program like AHEC, which is based upon partnership, cannot be of much help to institutions concerned with survival through competition. Before despairing over this point, we should be certain we understand what will be the underpinning of institutional survival in a competitive era. If one believes Naisbitt's *Megatrends,* then one believes in networking, regionalization, and communication, and other concepts that are the hallmark of AHEC. My observation is that institutional survival really requires cooperation and ultimately a greater integration and regionalization of services and of programs of all types.

If my contention needs validation, we need only look at knowledgeable institutional managers who emphasize vertical and horizontal integration. This is the modern jargon for AHEC's long term use of words "partnership" and "cooperation." The network of relationships already created by AHEC provides an academic underpinning to the service affiliations that are an inevitable part of any institution that wishes to be competitive in the future.

As I talk about our network of affiliations, I return to the analogy of the bridge, which is the theme of this conference. Several years ago, Cherry Tsutsumida invited me to be one of the speakers at a federal workshop for universities about to bid to become third-generation AHEC projects. In preparing those remarks I gave thought, for the first time, to the bridge, and as much as I like the analogy of the bridge, it still bothers me because I always think of bridges as passive structures.

And, to be sure, AHEC is a passive bridge, at times, with faculty walking in one direction and practitioners in the other.

However, we are more than a passive structure. Most of the time we are an activist bridge. We encourage people to want to cross from one side to the other. In order to do this, we use "winches and pulleys" or "carrots and sticks." These are dollars, powerful ideas, and the ability to demonstrate how the agenda of one group is served by crossing the bridge to work with another group.

AHEC is really a variety of types of bridges. These include:

- Academic/Community
- Public/Private
- Regional Center/Smaller Institution
- Federal/State/Local
- Physician/Nurse/Pharmacist/Allied Health/Public Health/ Mental Health/Dentist/Social Worker

and the list can be extended.

In closing, I want to show how our capacity to develop networks of extended partnerships means we cannot fail in the future. I believe we have three things going for us:

First, society will increasingly demand the broadest possible education for our students and residents. This will require both community exposure and the development of insights into the special needs of minority and other culturally disadvantaged groups. The comments of the first panel of speakers yesterday are compelling in this regard.

I believe that AHEC is the best vehicle for our schools in giving the students these exposures. I further believe that many of our medical schools have begun to realize this.

Second, as long as we have people caring for people, we have a need for updated information to be transmitted to practitioners. And if this is important today, what will it be like tomorrow, with the massive explosion of technology that is both exciting and frightening? This explosion has implications for continuing education that cover both the use of new technologies and the need to deal with the complex ethical dilemmas that will increasingly flow from these technologies. But technological development is not the only trend arguing for sophisticated mechanisms for information transmission to practitioners. Changing patterns of illness have profound biomedical and sociomedical implications. How does yesterdays graduate keep up-to-date with AIDS, teen-age pregnancy, drug abuse, and the effects of malnutrition? Many of these topics were unknown or poorly covered at the time of the education of yesterday's graduates.

And the challenge does not end with yesterday's graduates. What will today's graduates face 25 years from now, when they will be at the peak of their practice? Think of the need to understand home diagnostic kits, applications in clinical genetics, advances in neurobiology, organ transplantation, artificial organs, and possible infectious diseases in environmental insults not dreamed possible today. AHEC's capacity to bridge the research lab with the practitioner will be more vital than ever and will become more widely recognized, not less.

Third, the final thing going for us in the future is our past, our present and our promise. I believe the plenary sessions and workshops we have attended here in Tucson show that AHEC is replete with a new breed of academic and community leaders. We are the bridge to the future of quality health care delivery by the health profession's graduates of yesterday, today and tomorrow.

If AHEC did not exist, we would have to create something like it, just as we created AHEC with the collapse of the Regional Medical Program of the late 1960's and early 1970's. We have become a national resource.

In North Carolina, all of these forces came together for the nearly 700 employees last week at our statewide AHEC conference. With an enthusiastic reaffirmation of our mission and an endorsement of our extended partnerships, we pledged ourselves to continuing our traditional decentralized education and training programs, as well as our special initiatives in aging, health promotion/disease prevention, management, mental health, and nursing, with redoubled efforts to deal with the new nursing shortage.

We also pledged ourselves to developing three new thrusts on which we hope to be able to report at the next national AHEC meeting. These three new thrusts are:

1. Ambulatory-based medical and health professions education.
2. Planning for the use of new communication technologies to further strengthen what we think is the best educational network in the nation.
3. Planning for the next chapter in continuing education for health professions, by which we mean moving in the direction of curriculum development in addition to our more traditional patterns of hit-or-miss programs.

And so, I believe, the trends are really in our favor and that we can capitalize on them if we maintain our confederation and our constancy of mission. It is great to be a part of a program that has provided leadership and health profession education in the past and that will be a major factor in shaping the future.

As I noted earlier, in many states, AHEC is already a winner. As such, we are poised to meet manpower development needs that grow out of the health care problems of today and tomorrow.

PLENARY SESSION:
"EDUCATION OPPORTUNITY FOR RURAL AND MINORITY POPULATION"

Dr. Andrew Nichols

I would like to present Dr. Gordon Krutz, who is professor of anthropology and director of Indian Affairs at the University of Arizona, who will introduce Chairman Peter McDonald.

Dr. Gordon Krutz

Thank you, Dr. Nichols, guests, participants. It is my great pleasure to introduce a long-time friend and chairman of the Navaho nation, which is in Northeastern Arizona and extends into Utah and New Mexico. This is the largest Indian tribe in the nation. Ladies and gentlemen, my friend, Chairman Peter McDonald.

Chairman Peter McDonald

Thank you very much, Gordon, Dr. Nichols, ladies and gentlemen. It is an honor to see some old friends here at this conference, and I would particularly like to thank Gordon for the fine introduction. I now know how a pancake must feel when its immersed in maple syrup. When I was asked to come here some time back to address this distinguished audience, I couldn't help but feel good about it because I know that, over the years, I've known a great number of individuals who have been involved in AHEC. One thing I'd like to find out is the kind of people I would be talking to this morning. There has been some scientific research, I understand, in determining the personality of people. The tribe asked me to find out what kind of professionals and educators we were dealing with, so I'd like to take a survey here.

I'd like all of you to clasp your hands together and look at your hands. Those of you who have your left thumb over your right thumb, raise your hand. Those of you who have your right thumb over you left thumb, raise your hands. Very good. Just about even. They tell me that it has been scientifically proven that those of you who had your left thumb over your right thumb, are self-conscious. Those of you who had your right thumb over your left thumb, have a real strong sex drive, or so they tell me. It's not too late to switch thumbs.

I was delighted to receive the invitation to address you today because AHEC is an old friend. You may not know it but AHEC and I have much in common. We date back to the same origin . . . the War on Poverty, the Great Society. We have much in common.

I was happy to receive your invitation. However, I had to find something very meaningful to say. After all, what could I say to you that you do not already know? That you have not already heard from other speakers or discussed in your workshops? You are the experts. You are the professionals. You know the problems and you know what is needed to deal with the problems.

AHEC has always stood for truth, not for self-congratulations. AHEC was among the first to say, "There is wisdom in both traditions. The white man's medicine has its strengths; the Native American's medicine has its value." Both are needed. Do not force the Indian to choose. Surrender of tradition may be too high a price to pay — even when one's life is at stake.

AHEC has always stood for truth not for self-congratulations. It has always pointed to the shortcomings of the medical system, the limitations of a physician-dominated, hospital-dominated, crisis-care-dominated, and fee-for-service dominated system.

It has always been the first to say, "The Emperor has no clothes." It has always been the first to urge, "Physician cure thyself." But now, perhaps, it is also time to say, "AHEC cure thyself."

We need you. But we cannot afford a dependency upon you. We need your professionals and your knowledge and your dedication. But there will never be enough of you and there will never be enough dollars to make sure there is an AHEC and an AHEC project every place where one is needed. You must do better. We must find a better way.

That is my challenge to you — We must find a better way.

Your past holds the key to the answer, at least to a possible answer. We both know that when it comes to health care, the market system has failed.

- Failed to deliver health care.
- Failed to update the knowledge of health care professionals.
- Failed to overcome the barriers that minority groups have faced historically in gaining access to the health professionals.
- Failed to break the emphasis on crisis health care, hi-tech medicine, hospital-centered medicine.
- Failed to break the monopoly that doctors have exercised over medical knowledge and over the production of health care officials.

Go back to your origins. They will take you to the next step. Your two principle weapons were knowledge and time. Your first premise was that when knowledge is the principle resource, there is no excuse for shortages, because knowledge is infinitely divisible and infinitely renewable.

If you have an apple and you give me that apple, there is still only one apple. You must give it up for me to have it. But if you have knowledge and you give it to me, then we both have knowledge. Neither needs to go without.

Your second premise was that time — human time, caring time — was a resource that we all had and that we could all use to help each other. There was no reason to have shortages of health care personnel side-by-side with millions of people whom our society put aside as nonproductive: the old, members of minorities and single heads of households. So you opened up new roles for health professionals and you opened up those careers to minorities who had been excluded.

Time and knowledge were your principle resources and your weapons in the struggle to remedy the failures of the market system of health care.

Have you forgotten these principles? Why are you not willing to take the next step? To take them to their logical conclusion? If knowledge is infinitely divisible, and if human time is abundant, why do you accept scarcity? Why do you think that the only way to expand your efforts is to increase your budget and your staff?

I think you may have fallen into the same trap that you have accused physicians and the health care system of falling into. And yet, you know better. Aren't you really insisting on perpetuating a dichotomy between producer and consumer, health professional and lay person, provider and recipient? Aren't you implying that nobody can have anything unless paid for by dollars in the market, or given in the form of government benefits or services, paid for with dollars? Haven't you fallen into the trap of thinking that the only medium of exchange, the only measure of value, is the dollar?

AHEC knows better than anyone else that when it comes to health, the consumer must be a co-producer — people must work to get well; people must work to stay well; we produce our own health.

AHEC knows better than most that much, perhaps most of, the labor involved in health care is relatively unskilled, that much of the knowledge involved in health care is either common sense or can be learned fairly quickly.

Above all, AHEC has always known that people respond when they are valued and don't respond when they are treated like inanimate objects.

The question I put to you is this: Have you become so elitist that you are unwilling to turn the consumers of your services into producers? Are you so infected by belief in the dollar and the market system, which you criticize, that you do not recognize the existence of exchange systems that existed long before the dollar, that exist now on a massive scale in the traditional economy?

And are you unwilling to find a way to bridge to that traditional economy now — just as you were willing in the past to build a bridge from hi-tech scientific medicine to traditional medicine — and combine the two into a single system?

There is a way. There are doubtless many ways. I will describe one. My challenge to you is to find more.

Let me read to you from the front page story of the *New York Times:* Dateline: Washington, February, 1987.

> "Seventy-year-old Ella Amaker and 73-year-old Leona Downs need each other. Mrs. Amaker, a retired government worker, does household chores for Mrs. Downs, who can move about only by leaning on a walker. Mrs. Downs, a widow who is allergic to nursing homes, is able to drive a car and proudly says she 'helps a lot of people worse off than I am.' Her beat-up, 18-year-old sedan is available when Mrs. Amaker has to make a trip to the doctor. Neither woman pays the other for her help. Both are participants in a program, the Service Credit Volunteer System, that lets the elderly "purchase" needed assistance by exchanging services. The Program operates much like a blood bank. Participants who perform chores receive service credits that are banked and can be tapped in time of need. Anyone over 65 is eligible to participate, regardless of income, and many are both donors and recipients. Friends of family members can also earn credits and transfer them to someone's account. A computer records the service credits earned and a small staff matches the requests of those who call for aid and donors volunteering to help."

The currency is not dollars, my friends. The currency is TIME. Human time. One hour equals one credit. The IRS has ruled it tax-exempt.

Money buys two things: it buys time and it buys knowledge. But who says we have to have only one kind of money? There are green stamps. And there are coupons. And now, there are service credits.

The *New York Times* followed its article with an editorial: "Give Service Credits a Try." Here's how the editorial went.

> "Americans have bartered ever since the Pilgrims and Indians traded tools, guns, and beads for corn and furs. Now, several communities are experimenting with the barter of services to help the elderly and disabled. Representative Ronald Wyden, Democrat of Oregon, would nurture the idea with modest Federal support. It deserves that and more."

Suppose you tried a new kind of money. Call it the time dollar. And suppose the people you serve were now turned into workers, helpers, aides, paid in time dollars for learning and for helping, and able to spend those time dollars to buy help for themselves and their families.

Wouldn't that make a difference? Wouldn't that expand the limits of what you could do? And wouldn't that change the roles of people from being consumers to being producers? Don't you want to expand the supply of health service and knowledge being produced and being consumed?

Or have you become part of the monopolistic, credential system that restricts supply and access and inflates price beyond the means of the poorest and those most in need?

We need to build bridges:

- Bridges to the traditional economy.
- Build Bridges between the market-dominated health care system and the self-help system. We need those bridges to strengthen community and family and mutual support networks.

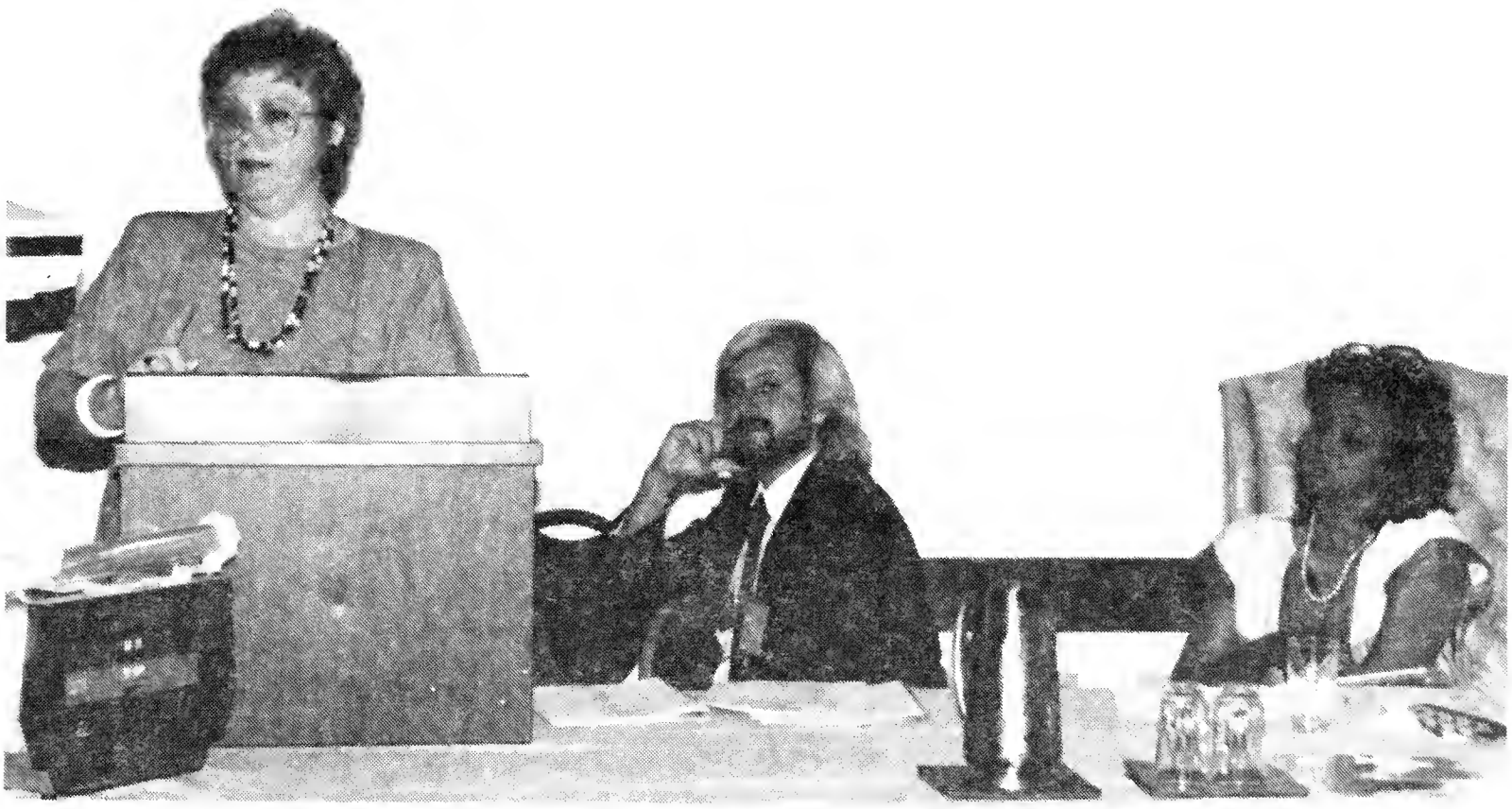
What are you going to do? Up until now, your mission has been primarily the education of health care professionals so as to meet the needs of medically underserved communities. Yes, that's needed and needed desperately. But that's not enough, there will never be enough providers of health care until we include the consumers as part of the production system.

I've suggested one way: a currency that enables people to convert their time into a marketable asset, by learning and by helping others. Maybe you have to expand your mission. Maybe you have to begin thinking about turning consumers into producers of health.

You know, 1988 is not that far off. That's when the AHEC program comes up for reauthorization. More of the same isn't enough. Not in Congress. And not in the state legislatures. You need to approach 1988 as the opportunity for a rebirth and renewal, not merely an extension. There are people out there who can help, and there are people out there who need help. We need some way to bring the two together.

You put on your hard hat and I'll put on mine. And I'll meet you in Phoenix, or Window Rock, or D.C. in 1988.

It's bridge-building time. Thank you.

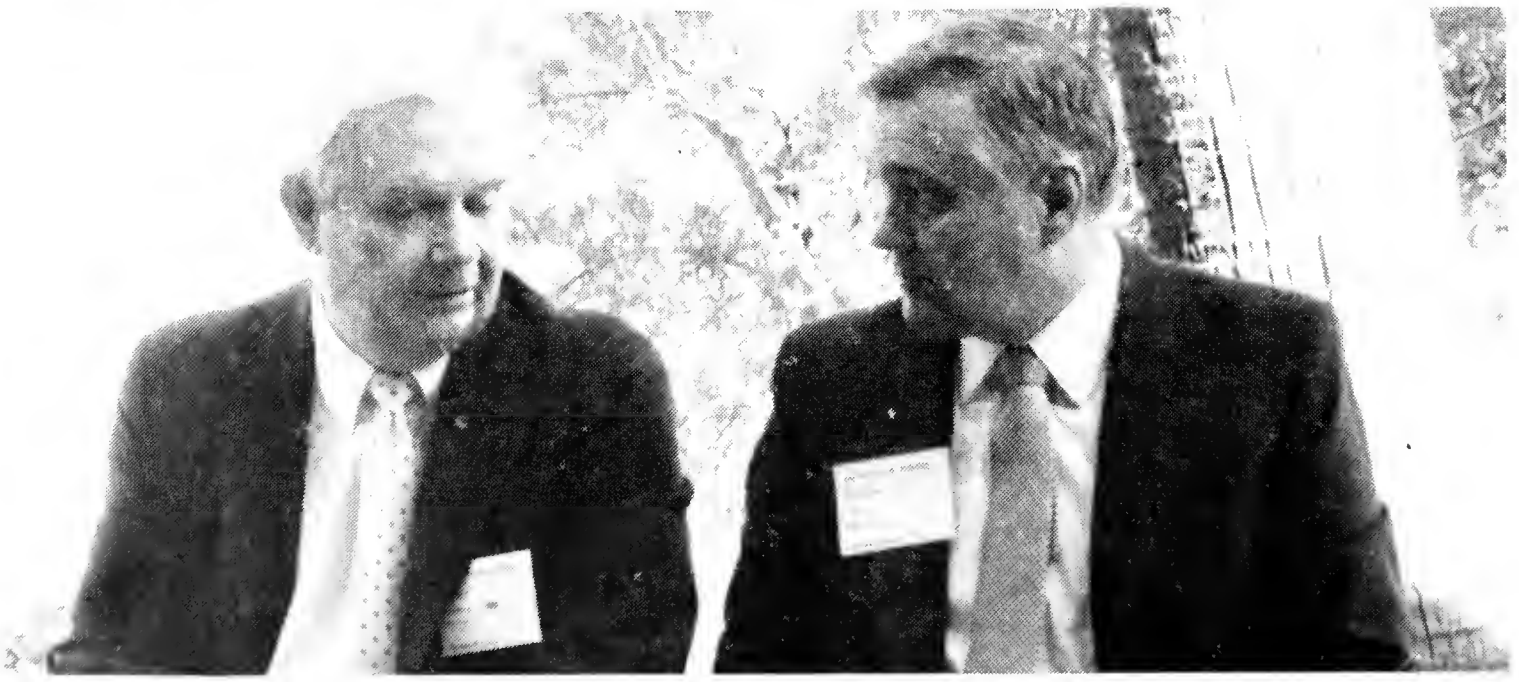


WORKSHOP EXCERPTS

(Editor's Note:)

One of the most popular features of the Workshop was the small group discussions held on specific topics, such as minority issues, evaluation, future funding strategies, etc.

Although it was impossible to report each of these sessions in their entirety, due to limitation of space in this report, some of the discussions are excerpted here to give a flavor of some of the thoughts expressed.



"PROGRESS EVALUATION"

Moderator Marilyn A. Mendelson, Ph. D.

In the early 1970's when the first AHECs were just beginning to be built, a methodology in the field of educational psychology was just starting up as well, and that new methodology was called Program Evaluation. Our focus will be on one central aspect of Program Evaluation, known as Process Evaluation. Process Evaluation attempts to describe the activities or the deliverables of a program and also attempts to measure or assess the congruence between the intent of the program and the realities of the program.

Susan Davis

I coordinated one Special Initiative in geriatrics; and now I'm doing one on toxicology, so we are going to talk about examples, mainly from these programs.

When we started our program at the Cumberland AHEC in Maryland, we received assistance from the Center of Educational Research and Development at the University of Maryland. The director, Dr. Gilbert Austin, introduced the SIT model, which evaluates programs. I will briefly talk about the aspects of the SIT model so you can understand how its works, and then I will talk about the process.

On context evaluation we define what the project plans to do and use these written grant proposals and continuing education programs. This describes AHEC . . . a context evaluation. It describes who you are, all your resources, your target population, your communities, and the resources in your community. It serves your planning decisions for your program . . . that is called context evaluation.

The second part of the SIT model is input evaluation. Input evaluation documents the use of the human, financial and other material resources, assessing the procedure you are going to be using. In a Special Initiative grant proposal, the evaluation procedure process serves to structure any kind of decision you are going to make about your program. Process evaluation is an on-going check of the implementation of the program. The process evaluation provides guidance for changing or explaining the plan as needed, as you are going through it, assessing periodically the extent to which your program participants are carrying out their roles. It serves implementing, and in the SIT model product evaluation, measures and interprets and judges attainments of the program. It usually is on-going from the very beginning to the end. The greatest part of product evaluation is done at the very end of the program. This originated from a book, which I highly recommend, called "Evaluation Models — Viewpoints on Education and Human Services Evalutions." There are several other models of evaluation provided in this book, and I have just happened to key into this particular one.

When we used process evaluation, we were fortunate to be able to employ an outside evaluator, and his salary was written into our grant proposal. When writing grants, start from the beginning to figure out how you are going to evaluate the program. An outside evaluator is extremely helpful because they are not on your scene all the time. Our evaluator comes in approximately once a week to visit our program, and assists the staff in carrying out the program, through a quality assurance process. He identifies defects in the procedural design of its implementation; he helps us to record and judge procedural events and activities; he prepares a questionnaire for all participants in the programs to complete; and lastly, takes his materials and information gathered at our location and prepares a computerized analysis for review. This process report in turn affects the decision making in the change process and, in turn, provides accountability to the various funding agencies. Thus, it is a tool to make the program more effective.

In conclusion, I feel evaluation is a necessary component of program improvement. Evaluation provides us with the knowledge of where our program's strengths and weaknesses lie. Evaluation matches our goals with the needs of the people they are intended to serve. Evaluation provides us with the awareness of program options and their effectiveness. An evaluation in the SIT model provides decision makers with information to make judgements about programs.

Donald Witsky, Ph.D.

Before we look at a procedure for documenting student/patient clinical encounter, it is of value to review some of the underlying issues. Is there a need to document clinical education experience? One answer to this question was provided by Gradford and Schofield. Schofield was the director of the division of accreditation for the Association of American Medical Colleges. In 1986, they reviewed student/patient related experiences in required medical clerkships in the United States and Canada. Among the questions left unanswered by their retrospective survey was: Who observes the student who takes a medical history and then performs a physical examination? What rounds does the student attend and/or participate in and what

responsibilities does the student accept? Is the student treated as an observer or an active participant? They concluded that asking students to maintain a log of their patient-related experiences might prove helpful. Such information in quantitative terms is necessary, they said, for proper evaluation of medical student's basic clinical experience.

What information does your current evaluation documentation process provide you? Would you know if one or more of your students were getting no experience in venapuncture, either for drawing blood or for the initiation of intravenous infusion? Would you know if one or more of your students were getting no experience in passage of nasal gastric tubes? Would you know if 24% of the patients seen by medical students were older than 50? Would you know if 52% of the patients seen by medical students in surgery were older than 60? Would you be surprised by any of these findings? The purpose of my presentation is to provide information regarding procedural issues involved in documenting clinical experiences.

There are advantages of any system of clinical experience documentation. For example, faculty and faculty advisors might need to know the number and type of specific clinical experiences students are getting. Documentation serves as a basis for curriculum revision. Clerkship coordinators will be able to make judgements about the type of clinical experience students are getting and the adequacy of the clerkship in meeting clinical clerkship educational objectives. It is important for university and community-based faculty to share specific public information on the student's experience.

There are some disadvantages of any system of clinical experience documentation. We touched on that briefly in the SIT model, and that is that they cost money. The estimate of $4,000 is really a reasonable amount. My estimation is 10-20% of the program, if you want to do an adequate evaluation. Recording information about student clinical experiences or the summary techniques used, requires people's time (and money.) Preparing information for analysis costs money; data which cannot easily be manipulated for multiple purposes is very expensive. The more ways that you can summarize data, the more utility the data has and the less expensive each datum is. A number of methods have been used to document clinical experience and often formats are sometimes mixed.

Student's self-report diaries have information which is jotted down during the day in narrative form, based on pre-designated categories. Student activity logs require students to record all of their activities as a function of the time throughout the day. Observational techniques involve the use of faculty or other observers to record the student activities in a structure or unstructured format, usually in a narrative form.

Retrospective surveys, those which are prepared from memory, asks the students to list their clinical experiences for a specified time period and information such as: what patients were seen; what problems were presented; what diagnoses were arrived at; what procedures were performed; what activities the student was involved in; and the level of supervision a student received.

Each method, either the student's self-report diaries, or the retrospective surveys, have advantages and disadvantages. No special equipment or materials are required for self-report diaries, there are low development costs, staff development time is at a minimum, and little or no training is required. A simple set of written instructions will usually suffice. Logistics are uncomplicated and students use a personal format to record information, and usually there are no requirements to code the information in a special way. However, the information tends to be unsystematic; type and level of specification of the information provided by the students varies widely; information received requires review and interpretation and the reviewers and coders must look for relevant information. Reliability issues may require multiple reviewers.

When using observational techniques, the advantages include the fact that the faculty can be observers, both in the quantitative and qualitative evaluation and in the documentation of the student's clinical experiences. Also, evaluation would be in real time and thus immediate feedback about the student's performance based on expert judgements are available. Summaries of information can be put into a contextual framework.

Using retrospective surveys is what the LCME asks students to do when they do your accreditation visit. The advantages are the same as those listed for self-report diaries and activity logs. The disadvantages of using retrospective surveys is that specific information is lost or biased, due to memory requirements. The use of recall to provide data is subject to errors and we usually over-represent the unusual, and under-represent the normal.

There are several advantages to using patient encounter logs. The encounter logs usually call for recording information in a standardized form, with pre-specified coded information. Large amounts of data can quickly and accurately be recorded, processed and analyzed. The use of an optically scanned form allows for no need to specially prepare the information before it is entered into a computer for analysis. Where scanner forms are not used, data entry can be efficiently done, as the form and recorded information is standardized.

However, the development of standardized forms and accompanying materials requires considerable work. You can plan on a two year implementation period to work out the bugs and revise the materials, time and time again. Dr. Joyce Nelan Weiss and her colleagues at the University of Southern California School of Medicine estimated that an annual budget for a project with 32 students in a physician assistant program was $28,000 in 1981. Training is essential. Collection and distribution of materials, along with quality control efforts, require substantial work. It becomes more complex when students at multiple sites have individual schedules.

There are several desirable characteristics of a documentation system. It should require minimal student and faculty time. It needs to allow accurate recording of detailed information; requires minimal data coding; and allows for flexible and timely reporting. For data to be of maximum utility, procedures should provide for immediate feedback to student and faculty. A single reporting format is usually not effective nor efficient, since different constituencies have different information needs.

We have used the patient log system to provide reports to a number of different constituencies. One of these is our LCME accreditation visit. We used student patient encounter data for that self-study evaluation. We have begun to use the patient log system for our AHEC program, and interest in this program is reasonably phenomenal. They feel that the number and type of experiences that students are receiving at AHEC sites can be documented with this system. They feel they will be able to gather data which will allow them to prepare a stronger program, provide information through their program and about their program, to students and faculty alike. Changes are currently being planned to include additional information on patient ethnicity, the language the patient uses in presenting, and the source of funding for their medical care.

There is a great need to document clinical education experience and such documentation should be based on student patient encounters. It is the only way to know what is happening in clinical clerkships. And finally, the coding, analyzer reported data should be automated.

Steve Ciaola, Ph.D.

This was a good experience for me to really look at what we do in the sense of student evaluation within our academic internship, which is one semester of experiential education into a full-time program for our senior students. In speaking of evaluation, "It is said with considerable truth, that the best way to kill an educational experiment is to evaluate it. One can almost be certain in advance that the measurable results will not show a significant improvement."

Let me give you a bit of background on what scope we are looking at when we work with the students in our academic internship program at the University of North Carolina, Chapel Hill. There are nine AHECs, but in pharmacy, there are ten. Our school of pharmacy — not AHEC dollars, not state nor federal dollars, but state dollars — pay for an additional faculty member and there are 160 students in our senior class.

Our school's experiential education program would be impossible without the AHEC program. There are two primary programs that utilize the AHEC system, which we call our academic internship program and a doctor of pharmacy program. The 16 week academic internship program is broken down into four rotations: experience in community pharmacy practice, hospital pharmacy practice, clinical clerkship, and an elective, which is the the student's choice in another hospital or pharmacy practice.

The doctor of pharmacy program, enrollments have now peaked at 15 students per year. It consists almost entirely of clinical clerkships, with approximately one-third done throughout the AHEC system, and the other two-thirds done in our UNCCH teaching hospital with our campus-based faculty. Our faculty has gained a fine reputation for what they are doing in community primary care practices and specialty practices at the university-based sites. With about 40 months of clinical clerkship rotations and 4 months of rotation in our academic internship program for each of these 80 (approximate) students per semester, we have nearly 700 student months per year of experiential education.

I work on a daily basis with our academic internship program and would like to tell you more about how it is structured and who are the people we have to work with. There are four faculty members based at the University of North Carolina, Chapel Hill that work with our experiential education program. One of them was primarily with CE elements of AHEC, and the other three work primarily with the academic internship program. We have 18 faculty members who are based throughout the AHEC system, 17 of whom are funded largely by AHEC state dollars and one funded by school dollars. We have over 260 volunteer preceptors, who are community hospital pharmacists and home health care pharmacists, and a few other people from clinics. They are based throughout North Carolina at 167 different practice sites, all of them being coordinated through our school. There are over 100

community pharmacies, over 60 hospital pharmacies and 24 clinical clerkship sites. Twenty of the clerkship sites also offer hospital pharmacy rotation.

We do a fair amount of product evaluation. Let's take a look at what that product is and what the results are. First, a quick look at who the players in this academic internship program are. Who are the players who are involved at looking at the process of what the student learns? This involves looking at the components of who interacts in the context of this experiential educational model, this one-semester model. All of these players, the people in Chapel Hill, the faculty that are decentralized, the volunteer preceptors, the students, all of them are in an interactive mode, utilizing both formal and informal communications.They are held together, with respect to this academic internship program, by the course objectives and activities which have been pre-set and are now undergoing an almost annual revision, lately involving a lot of practitioners and students.

The only formal process evaluation tool we use is for each student within a given single rotation to receive a progress report that is done for each four-week rotation. Two weeks into the rotation, a student has a form to use that looks at each of the objectives of that particular rotation and each follows a process of evaluating how well each is meeting those objectives. This is a written tool that is shared with and signed by the preceptor. It's a mid-course kind of tool, a simple one-page form that evaluates from the student's perspective as well as the practitioner's or preceptor's preceptive, how well the student is doing. That tool is shared through interaction between the facutly member and the preceptor.

A student project is required for the first time this year, that relates very specifically to what that preceptor's practice model involves. Previously, the projects were always one semester and based on what the faculty was interested in. We decided that the student internship ought to be something that evolves from the practice site throughout this four-week experience.

I can say that this process has led to a number of students changing their rotations. For example, a student may choose an elective in the same community pharmacy where he/she is doing a four-week required community pharmacy rotation. Because it's a very complex practice, the pharmacist may say hey, this guy has such a good experience with me and he picked up everything that I could offer, and another four weeks is unnecessary. Or, this person didn't learn very much t all on those objectives that we had defined. We need more time and we have a student who finished this week and didn't graduate because of an inadequate amount of learning that occurred in one of these four-week rotations. That student knew, six weeks into that 16-week semester that he wasn't going to graduate with the group, so this process would allow that to be picked up early instead of at the end. So there were good things that came out of that experience. That's kind of where we are with process evaluation in our particular academic internship program. There are a number of things that we're going to be doing to improve this particular model and where we're going with it. We have developed this year, and will get going in full force next year. A practitioner instructor development program committee involves practitioner instructors, that's what we call our volunteer preceptors.

We've obtained a grant from the American Association of Colleges of Pharmacy this year to develop a curricula model for our instructors and that's going to be based on behavior that will facilitate student performance and facilitate good interaction between the volunteer preceptors. This model will also take into account behaviors that hinder the performance throughout the four-eight week rotation, and that hinders the learning opportunity. The emphasis will be on those behaviors that hinder and those behaviors that facilitate the student learning process.

WOMEN'S HEALTH ISSUES

Carolyn Ford, MPH

I am the Acting Deputy Director for the Nevada AHEC project. We are known as a third generation AHEC since we are one of the last ones that have been funded, beginning our project on October 1, 1986, and we are still in the planning stages. I am also Director of the Office of Rural Health for the School of Medicine in Nevada. Our AHEC project is a rural-based project and probably will be the smallest one in the nation because our center will be located in a community of 9,000 people, 350 miles from the School of Medicine. It is going to be a real challenge to implement AHEC without any matching faculty in a community that size and to also do inter-disciplinary programs.

We have basically looked at our issues in terms of a designation called Frontier, which is much different from urban and rural settings. Frontier is actually 6 or less persons per.square mile and 60 minutes or greater to the next area of service. In using that kind of criteria to plan health services delivery and education, there is the concurrent problem of how to implement programs.

We've chosen five specific issues to implement: Geriatric, Mental Health, Perinatal, Trauma, and Nutrition. These relate to women's health issues in several different ways. In the perinatal area, we have a crisis in Nevada because 77% of our physicians have stopped doing obstetrics in our rural regions. Women are faced with a dual problem: (1) access to perinatal care in their home area, and (2) acceptance by physicians in urban sites, who often will not accept patients who must travel great distances. Many women do not have the means available to reach urban areas for treatment. There is no public transportation system in these communities, and the distances are aggravated during winter time due to ice and snow, which usually doubles the amount of time required to reach an area for service. The perinatal issue for Nevada is going to be high on the list in terms of access.

In relation to our mental health programs, domestic violence is an extreme problem in Nevada. Any of you who work in rural communities know the problem with confidentiality and having basically a small population where the people employed in social service agencies are probably people that the patients know socially. Consequently, a lot of women will not seek service because they don't want their personal lives shared among their "friends." It is a real problem in terms of not only having the service available, but the confidentiality in having to go out of town for any assistance.

In Nevada we have a larger than usual geriatric population, especially in the rural areas. In communities across the nation, approximately 11% of the population is 65 or older. In many of our Nevada communities, the figure is 20% or higher, so access to services for the geriatric population is another extreme problem. In terms of medical outreach programs, access is small, if nonexistent. In relation to home health care, our one rural-based home health agency just went bankrupt last week, so I do not know what will happen now.

Lastly, in our program of infectious diseases, we will be addressing the problem of AIDS. In Nevada we have legalized prostitution, and in some ways, we have a better control mechanism for women's health checkups once a week. Thus, we have a way to monitor and check for any AIDS-related cases. Fortunately, we have not had any AIDS-related cases in the prostitute population, and we currently have a very small AIDS count in the general populus. There are 100 cases in the whole state, although we haven't topped a million people in the state as of yet. AIDS education and outreach is going to be one of our focuses, especially in the rural communities. We have no support services at the present time for AIDS patients. There is a lot of concern by health professionals in rural hospitals about how to treat patients, and also by the

providers who are diagnosing to ensure that they have the most current information. Our educational focus, especially in terms of women's health issues, is to disseminate AIDS-related information to our rural communities.

With that as an overview I would like to introduce our panel speakers. Our first speaker will be Nancy Opie, who received her BSN from Spauling University and later got her master's degree in Psychiatric Nursing from the University of Cinncinatti. She also has a doctorate in Psychiatric Nursing and Medical Sociology from Indiana University. She is currently associate professor of Psychiatric and Mental Health Nursing.

Nancy Opie, Ph.D.

I am not associated with an AHEC, and although we have one in our area, they have assured me that they are not involved in women's health issues to any great extent, other than in the traditional medical sense.

I am going to talk about women's health research and the implications of some research for rural women's health. As you know, not a great deal of research has been done that involves rural women. The research that I will address is largely done on urban women, but it has a lot of implications for rural women.

First of all, the women's health movement has had a tremendous impact on research related to women — research related to the psychology of women, how we educate women, socialization of women over a lifetime -and it, of course, has impacted women's health research. We are indebted to the women's movement in general, and specifically the women's health movement, for raising our consciousness about research and the need for research in terms of women. The women's health movement did a very fine job of that and produced a number of feminist scholars who raised a lot of new issues and questions which needed to be raised. Unfortunately, they have not addressed the needs of minority women, women of ethnic groups or cultural groups, nor did they look at women from the rural areas. I think that probably happens for a number of reasons. Rural women are more isolated and more removed and unless your voices are heard, people do not necessarily think about those kinds of things.

With that in mind, I would very much like to call attention to the need for women to be involved in research. Research is not just done with and for women, but research has been done by women. It was a critical issue for them. The questions that women would address are different from the questions that men raise, and women in research have raised a lot of issues concerning the way research was done with women.

Specifically, I think we often operate on stereotypes about rural women. We have a romantic view of them that they are rugged, independent, self-reliant, and individualistic. When you think about women in that kind of way, they don't need help. They are able to take care of themselves. We totally overlook that population if we operate on that kind of stereotype.

In reality, as most of you who are working in rural areas know, women in rural areas are a very diverse population. They come from all walks of life, all cultural groups, a variety of ethnic groups, mixed heritage, and it is a very significant population. They number over 34 million, which is a significant population. But in addition to that, it is really very important that we recognize that women have a right to health care that is specifically for them, not just for the fact that we are concerned about their offspring or what they are going to be able to do for their families.

What I want to do in discussing research is to address it in terms of some of the characteristics that are fairly common for most women in rural areas. Those characteristics are that they have a conservative orientation for themselves, their families, and the people that they interact with. They have a conservative orientation toward sex roles for men and women. Another characteristic common to most rural women is that they have limited options, fewer services available to them, and those services are usually more traditional in nature.

Most of them experience some degree of isolation and therefore reduced support systems. There is a very high rate of poverty among rural women. It is estimated that approximately 50% of rural women are in the poverty level which has very, very serious implications for their health care. They are also subject to increased child bearing and generally have more children than urban women. And with all of these factors, especially when they are combined — the more of these factors that women experience, the more vulnerable it makes them in terms of health care problems. There are other characteristics associated with rural women, such as chronic illness and exposure to chemical agents, which have not been adequately addressed. Rural women generally have a lower incidence of acute illness but a higher incidence of chronic illness. They experience a high rate of accidents and occupational injuries, usually related to the farm work that they do. Another interesting factor is that although rural women have equal or less rate of depression compared with urban women, they do have an increasing rate of psychosis. We will talk about that a little bit in terms of whether that is real or not.

The dominant roles that rural women are involved in are child care, domestic work, and home management. They are very frequently the major assistant with farm chores, and they are the people who are generally responsible for maintaining the links with the community, the church, and also assume responsibility for caring for the ill and aged. Urban women, as you know, have moved out of the home. A very high percentage, close to 60% of most urban women, are now working outside the home. The role for rural women is also changing and is changing very rapidly. Increasing numbers of them must leave the rural area and find jobs to support their family. In the past, even though they have been major contributors to the farm economy and to the maintenance of the family in a variety of ways, that kind of work traditionally has not been recognized. It was not recognized in the legal sense or in the economic sense. When we developed policies related to rural or farm areas, women have generally been overlooked and that is a problem.

Let me start with some of the characteristics of rural women and talk about these characteristics in relation to some of the research that has been done, which I think is very relevant. A study conducted by Deborah Bell has been published as a book called "Lives and Stress". Ms. Bell talked to a number of women who lived in inner city areas and she correlated the levels of stress — poverty, social isolation, a sense or lack of any kind of impact on their world — powerless. She found that as these factors increased, the rate of depression among women also increased. When we think of these characteristics in terms of rural women, we must be concerned about that. We need to be providing services and support systems that can help them to undercut some of the problems that they experience.

There is other research currently being done that I think is very powerful in terms of the violence that is perpetrated against women. Judy Herman at the Stone Center is doing research on women and violence. In all of her reviews of the literature and collecting all of the studies that have been done on the incidents or the risk rate for women and violence, she is finding that the lowest rate reported is 7%, and in some groups of women, the incidents of violence are at 80%. Approximately 50% of us currently can expect to experience some violence to be perpetrated against ourselves. Some feminists even claim that American women are hostages in their own country. In addition, one girl in four will be sexually molested by the time she is 13 years of age. What is even more frightening to me is that the majority of this abuse occurs in their own home. It does not occur out on the street.

Another of Ms. Herman's research projects, in which she interviewed 120 pregnant women, showed 50% of them were victims of marital violence during pregnancy. Paula Hillard, who is at the University of Cincinnati, did a study just in terms of her own clients when she was in Virginia. She had a population that was largely middle class, but spanned most of the socioeconomic levels. She found that 11% of her OB clients were physically and/or sexually abused during pregnancy.

I think that these statistics tell us that we should be doing something about assessing women for violence. That needs to become a regular part of our assessment of women. With almost any other kind of problem that we experience in our population, when it reaches 10% or so, we begin to assess for that and I think we need to find ways to do that with women. Most women, we have found, believe that they are somehow the cause of the problem. That probably results from the fact that we socialize women, little girls, from day one to be responsible for relationships. It is only natural that they would begin to believe that if they only worked harder and did the right things, that they would be able to manage the situation better.

I think this is a particular problem in rural areas. In addition to having sisters and a mother who live in a rural area, I have a daughter who works in a rural area, near Cincinnati, and she deals with a lot of women and young girls who are sexually abused, or physically abused. In order to get them out of their situation, she must send them to Cincinnati, which is the nearest shelter and is 50 miles away.

One very interesting piece of research being done in this area is being conducted by the psychologist, Edna Rollings and some of colleagues. Ms. Rollings is looking at the clients that they see to determine if they fit into the "Stockholme Syndrome." If you recall, in the Stockholme Syndrome, those who are held as hostages and spend any great amount of time with terrorists, relatively quickly become bonded to these people. When they are freed, they want to protect the people who held them as hostages. It is a very peculiar phenomenon but they suspect at this time that something similar to that happens with women who are exposed to sexual or spousal abuse in their homes.

Basically what she says is that labels are very powerful tools and, once you label someone, then it directs how you are going to work with that person. Some of my colleagues have also questioned the therapies that we use with women. One of the more common kinds of treatment modalities that we have come to like and cherish is the systems approach, family systems therapy. A number of

people have noted that when you use systems theory, you are using roles, and that if you are of a traditional mind set, what you are going to do is reinforce traditional roles.

Denise Webster and a number of other people have also called to our attention that just by the nature of the characteristics that we attribute to women — the ways we want women to behave and socialize them — makes them vulnerable to the diagnosis of depression. Many of the characteristics that are associated with women are also the characteristics of "symptoms of depression." We have to be very careful about labels. When it comes to psychosis, it is easy to place labels on women who get out of control. Anger is something that none of us deals with very well. We also have a great deal of difficulty with that. I have been teaching a course in women's health research and, throughout the course, my students have been coming to class every day and saying it is very difficult to read this material. These women are angry and want to get over the anger because they can not deal with it. Most of us, when we really get into an anger, feel that fear related to getting angry and we fear it when our clients get angry.

In terms of limited services, there was a national conference held in Washington in 1977 that was commissioned by the President and there was a special report. One of the primary things recommended was increased health education. One of my colleagues, who is at the University of Pittsburg, is doing a study related to breast cancer and is particularly interested in the women who are high risk for breast cancer. Not the people who have already been diagnosed and treated, but their mothers, sisters and daughters. Many of the women did not know whether or not they had had a mammography. The study found that these women had had a chest X-ray but thought that they had had a mammography. Most had not been taught self breast exam, and very few had been told that they needed both. If this is a problem for urban women who have access to care, I think we might make some assumptions that this is also a problem for rural women. We also know that just to provide pamphlets or reading material is not sufficient for women. The best way to teach the self breast exam is to do it one-on-one.

Let me share one other piece of research that I think is important in thermoexposure to environmental hazards and chemical agents. It relates to rural women in that we have a number of nurses who work in rural areas and will be exposed to this. Two of my colleagues at the University of Cincinnati are studying nurses' exposure to chemotherapeutic agents, what they know about that, and what kinds of decisions they make in relationship to their own health care and their reproductive status. First of all, they have found that these nurses lack sufficient information to make appropriate judgments. They generally have a belief in their own safety due to the fact that their reproductive organs are inside, not exposed, and therefore they believe that those organs are safe. We do not know enough about absorption through the skin so there is some concern that there could be some potential problems if they do not practice appropriate safety measures. Many of them believe that if they do not want anymore children, they do not have to worry, that they can go ahead and not really take the precautions that are prescribed.

Everything that we address in terms of urban women could also be questions that you raise about women in the rural area. We need to know more about the services that we provide for them. We need to know how effective these services are and we need to know that from rural women. We need qualitative kinds of research to see what their needs are and what they find helpful. I would be glad to talk with any of you who have additional questions or would like to discuss possible research topics. Thank you.

Carolyn Ford

The next speaker is Susan Geise, who is the primary consultant to the Prevention of Psychotropic Drug Abuse in Women project at the Southeastern Oklahoma AHEC. She is a licensed clinical psychologist and assistant professor of Behavioral Sciences at the Oklahoma College of Osteopathic Surgery and Medicine in Tulsa.

Susan Geise

I am going to provide a general background on psychotropic drugs in women. When we talk about psychotropic drugs, what I am referring to are drugs that are called psychoactive drugs. This is medication prescribed by a physician in order to alter the patient's mood or mental state. The most common examples of these kinds of drugs are minor tranquilizers. Approximately two-thirds of all psychotropic medications that are prescribed are minor tranquilizers. In terms of the trade names that you may be more familiar with, they are Xanax, Transxene, and Valium. These are the most popular minor tranquilizers. We are also including anti-depressants, stimulants, sedatives, barbituates and hypnotics. These are the different categories of drugs that we are addressing in our project. The major tranquilizers that are given to psychotic patients or schizophrenic patients are not a focus of our project, nor is Lithium or other medication for people with manic depressive disorders. those kinds of medications that need to be used on a long-term basis are different from the issues we are looking at.

Here are some statistics on drugs used by women: over two-thirds of all prescriptions for psychotropic medication are written to women. It is a pretty consistent finding that about 20%, or 1 in every 5 women, will say that in the past two weeks they have used some type of psychotropic medication. Data gathered by a federally funded project in 1979 reported that an estimated 17 million adult women had used psychotropic medication sometime during the past year and of those, about 2 million or 12% were regular users and had used the drugs daily for a year or more.

I have found one published report about rural women and their use of psychotropic medication and it reported that the rates were very similar to those of urban women. One question of interest is why do women end up receiving these prescriptions more often than men? There are several plausible hypotheses that one might present. One is that, in general, women seek help more often when they have a problem, whether it be a mental health or physical problem. They have more contact with physicians and with health professions in general. Another possibility is that women, again through socialization processes, just tend to be more expressive of their distress, their symptoms, their pain. Their symptoms may be coming to the attention of the physicians more often or in more dramatic or blatant ways. Several writers have hypothisized that because of women's disadvantages in our society in a number of different ways, they are likely to be depressed and therefore presenting these symptoms and receiving these prescriptions for those symptoms. A final possibility, although I am sure there are many more than I have presented in this handout, is that physician's prescription writing practices may be influenced by their own values or their own sexual stereotypes in a very subtle way.

Psychotropic drug use by women is a concern because there are several risks associated with use and especially, misuse, of these drugs. One is that people may become dependent upon the medication. This usually does not happen with an antidepressant medication, but it is fairly common with the minor tranquilizers, as there is a subjective "high", "buzz", — a good euphoric feeling that is accompanied by these medications. Overdose is another risk. In studies that have looked at regular long term users of these medications, they found that 90% of the women tend to take more of the drug than has been prescribed. They use larger quantities, or they take it more frequently than the physician originally prescribed.

There have been some interesting results reported in terms of increased drug use by the children of women who use psychotroic medication. Children who are growing up in families where the mothers are using these drugs, tend to use all kinds of drugs at a higher rate than other children. I would think that this is one obvious hypothesis to explain what would be a kind of modeling that is going on in terms of teaching children that when you have problems, you can turn to medication or drugs to help you alleviate your distress. If women use these drugs while they are pregnant, there is a risk to the fetus.

There is a high rate of cross addiction in those women, especially in those who use a minor tranquilizer and alcohol, which potentiates the effect of the other. Women who use those medications are increased risks for auto accidents. I think one of the major risks or negative consequences of misuse of these drugs by an individual is that they use a medication or drug to help them deal with stress, but that they do not learn how to develop coping skills or strategies to deal with the stress that is going on in their lives. In essence, I think you put them on hold; it alleviates the current distress, and they are not learning new behaviors and/or new skills.

The high risk groups of women, those who end up using and misusing these drugs more frequently, are women over the age of 25. Housewives, women who are unemployed, and socially isolated women have a much higher rate of use of these drugs. Research has found that women who have gone through recent changes in their lives and encountered a level of stress use these medications most often. Women who have reported themselves to be anxious or depressed, and have repeatedly displayed these symptoms, use the medications more often. As a group, they are more likely to describe vague physical symptoms, this has a large part to play in the fact that they are prescribed these medications.

You may predict that it might be psychiatrists who would prescribe these medications more often than other physicians. But in reality, it is the primary care physician who is the primary prescriber of these medications. They prescribe about 85% of all prescriptions to women. One issue that has come up for us in the project, and we have tried very diligently to address it is the fact that these medications are very helpful and extremely beneficial when used properly. Our intention is not to say, "look at all these statistics and the risks and you better be frightened", or "you should never use these drugs". That just simply is not the case. When an individual is in a crisis situation, or in an unusually stressful situation and does not have the resources to adequately address and cope with the situation, it is a very appropriate time to consider the use of this medication. It is also very appropriate when the medication is used on a temporary or short-term basis, and depending on the situation, that might mean for a day or so. I have seen a cut-off, in about six months, as the time that other forms of treatment ought to be evaluated if the drug is still being used continually. Another time it is very appropriate and safe is if the individual is also receiving psychotherapy or some other type of behavioral intervention so that they can learn how to change their behavior to cope with the stress. The need for the medication should be decreased.

How do we determine when the use is appropriate and when it starts getting into the area of misuse or possible abuse? One instance is if the individual has used the medication on a long-term chronic basis and when it is not sanctioned by sound medical practice. The patients who get into this kind of pattern of long term use often engage in doctor "shopping" to obtain multiple prescriptions. They usually have lots of excuses and stories about losing prescriptions, medications, things of that nature. Another time when misuse is indicated is when the person is medicating themselves. Also, they may be using a prescribed drug for other than medical kind of purposes, such as using them to achieve some kind of high or euphoria type feeling. Or, they may be sharing the drugs with other people, using a friend's or relative's drugs, or using these types of medications with alcohol, or two or more of these medications in combination to achieve the desired effects. These are all indications of when it seems their drug use may be becoming inappropriate.

Carolyn Ford

Our next speaker is Carol Gill. Ms Gill received her B.S. degree in Home Economics from Southern Nazarene University and her vocational health education certification from the University of Oklahoma. She is the project coordinator of the Southeastern Oklahoma AHEC for the Prevention of Psychotropic Drug Abuse in Women's projects at Poteau, Oklahoma.

Carol Gill

Our project, the psychotropic drug abuse prevention for the county, is funded by the Oklahoma Mental Health Department with support from the Southeast Oklahoma AHEC and Carl Albert Jr. College. We have identified a county within our state to be the project area. We have the elderly, the socially isolated women, and we have some rather traditional views of women's roles. We have mentioned the group that is most likely to misuse or abuse the psychotropics; women who are at high risk as described in our demographics. Also, we do want to reach physicians with educational programming, as they are the prescribers and the critical link in effecting change. As mentioned, about 85% of the psychotropics are prescribed by primary care physicians. We want to build community awareness, support and initiative in dealing with this project, which will be the third phase of our project. Those who provide services to women, as well as community groups, are part of our project.

First of all, we want people to understand psychotropic medications. This is a fairly new term in our area. We are not talking about major tranquilizers. Secondly, the appropriate and inappropriate use of these psychotropic medications and the importance of developing skills in coping with and reducing stress. These are a temporary coping device and they are actually putting-on-hold the problem until the person is able to cope. Also, the importance of developing skills in communication with physicians, family members and anyone else who might be involved in creating the situation for which they are receiving medication and utilizing support services available in the community. Many times the services are there to help, but the people are either unaware of them, or physicians are not making referrals to those services. We are trying to help build bridges and help people find more appropriate ways of dealing with their stress.

We are talking about psychotropics as used for stress, not psychotic conditions. Our project spans a two-year period. We have had general psychotropic education information going out in the media and secondly, we have had physician education seminars, which took place during the first year of the project, which began July 1, 1986. We are entering our second year of our project and we will be concentrating on providing information services to existing community programs.

HEALTH & EDUCATION ISSUES FOR HISPANICS

Moderator: Maria Elena Flood

I am the Project Director for the Texas Tech AHEC program and it is a pleasure to have the opportunity to serve as moderator for today's presentation. These are particularly serious issues that we are going to be addressing. You will have, what I consider, some very important front-line people involved in your presentations. We are going to have topics that are of particular interest to those of us who will be working in areas that have high Hispanic concerns.

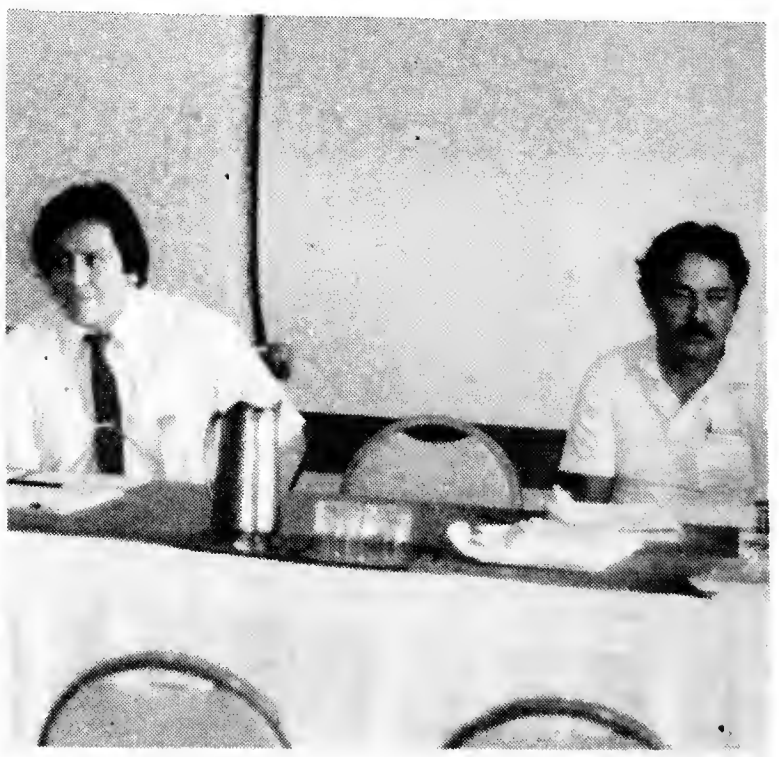
Tony Estrada, D.P.H.

The Hispanic Health and Nutrition Examination Survey specifically focused on utilization barriers. Many researchers and health providers have agreed that in order for Mexican Americans and other Hispanics to become full participants in the American health system, they will need to overcome several barriers. These barriers have been noted in the literature as informal peer sources such as family, friends, and healers, with the exclusion of formal sources of health care. Barriers such as conflicts with the western health care system due to language and cultural differences; barriers of utilization based upon income and financial constraints; lack of a regular source of care and health insurance coverage; lack of transportation and geographic inaccessibility; and segregation that borders on racism, especially with the legislation and fragmentation of the health care system. A number of these barriers must be overcome, particularly those dealing with administrative decision making that affects the needs of Hispanics, who are culturally sensitive to Hispanic issues, to really be in the forefront of making policy decisions that extend health care services to the Hispanic population.

The Hispanic Health and Nutrition Examination Survey sampled five states in southwestern United States, and the report I will be giving here will be on the Mexican-American portion of this data. The sample base is approximately 7500. The data presented today is 4500, depending on the variables. The key areas of samplings were in Texas, with some in Colorado, New Mexico, Arizona, San Diego, Los Angeles and the bay area.

The first area is encountered barriers in response to the question: Have you encountered any difficulties getting medical care. The second question is: Have you ever been prevented by these barriers from getting medcial care? The number one rank is cost, which is not surprising considering the low income of these persons and the lack of insurance coverage. It also ranks as number one in being prevented from getting health care. So not only are these persons encountering barriers because of financial difficulties, but they are actually being prevented from getting that care.

The second barrier, of course, is having to wait too long in the office, which is an accessibility issue. Having to wait too long to get an appointment, because the hours were not convenient. Again, this is a service agency component. Other barriers that patients cited were: was not available when needed; not knowing where to go; not having a way to get there; the need for someone to take care of children at home; there is no confidence in the clinical staff; because they do not speak Spanish; because the staff was disrespectful; because there were no Hispanic staff members — surprisingly in this sample of over 4,000 Mexican-Americans, these barriers ranked 10, 11, 12 and 13th. This is contrary to what is reported in the literature, which indicates if you are culturally sensitive, and provide bilingual services, utilization of services is increased. I believe that what we are seeing here is probably something out of context. Because of my own experience out in communities, you do encounter these barriers.



The next program is the medical student clerkship preceptor program, which Dr. Montoya has had a big hand in, and I consider it to be one of our better programs. This plan developed out of a sense of knowing that medical students needed the opportunity to work in a practice site that they hoped to eventually practice in, or to become exposed to an area they may not have considered in the past. This is important when you think of medical students who have trained, and the fact that many medical students get wrapped up in their premed years and then in medical school, get separated from their communities. Although they have a commitment, that commitment can wane over the years. It is very important to continually re-expose medical students to communities that they had originally planned to return to, so that they don't forget what their intent was in the first place. It also helps because by re-entering the community with more knowledge in the health area, they can go back to their medical school for the rest of their training and know more in terms of what they need to pull out of the training to take back to the communities when they return to practice.

The next thing is academic support. This is an important element of our program in terms of ongoing planning, supervision and evaluation at the activities developed by the HISMET Committee. It also includes the sponsorship of an annual statewide conference to discuss Hispanic medical education. It further stresses the importance of developing border conferences to discuss health care issues that impact not just in California, but all border states.

The next is the family practice residency expansion, and that encompasses five different residency sites. We all appreciated the fact that we needed to focus on a central training site as a model. We needed to develop the curriculum at that central site and we needed to develop a central area where residents and medical students could see family practice for the Hispanic family practice model. But we further agreed that there was a need to address existing resident's programs that also service large Hispanic populations in both rural and urban areas.

When you look at California in terms of residency programs, they are spread out from north to south. We recognize that because our communities are so geographically varied, our training program should also be geographically varied. We thus proposed that certain programs would be selected to enhance a curriculum to meet the needs of the regionalistic cultural language and economic differences of the various populations. As I am sure you are all aware, providing health care to an urban population and to a rural migrant population is very different in terms of their health care needs. It is very important that the providers understand the regional needs of that population.

Our hope was to accomplish three major goals when we established the residency expansion program. Number one was to increase the number of Hispanic residents or other residents who have a commitment to working with the Hispanic population. Again, we recognized that looking at the numbers we currently have, we could not depend strictly on Chicano residents or physicians, because we just do not have enough. Our goal, of course, is to increase the number of Chicano physicians to provide that care. We also need to look at the fact that we have to train other non-Hispanic residents who might be interested in working with Hispanics. Number two was to develop new required curriculum into the residency program that would provide more effective training for residents wanting to work with Hispanics. Number three was to develop and recruit faculty who can address their needs effectively.

Taking each program very briefly and telling you what they are up to: first of all, the University of California, San Francisco Salinas' program. They have hired a behavioral scientist who designed a cross cultural curriculum for the residents and is now giving workshops on cross cultural issues to these residents, as well as medical students and local practicing physicians. Part of our plan would be to not just train residents who are currently there, but to also outreach to practicing physicians. They have also expanded their precepter sites for residents with local Hispanic physicians, again allowing them to work in a predominantly Hispanic practice. They are beginning to provide educational programs for the Hispanic community. They have a column in the local Spanish newspaper where they are giving medical information. They have also begun to provide free health screening in their community, and they are continuing to provide services that were not available prior to this particular grant from AHEC.

The second is the Stanford South Bay Program in San Jose. They also have added a cross cultural teaching component to the residency curriculum. They are also adding a new resident rotation to a largely Hispanic community clinic, the family practice health center at Almenaden.

The next program is the UCLA, Drew program in Los Angeles. They have just started developing a residency. They plan to develop an Hispanic oriented curriculum for their residents. They also propose that they would like to develop a part-time residency program within a Hispanic community. They want to address physicians who are already practicing within Hispanic communities and have already shown a commitment to working within the Hispanic communities and to more effectively train them to provide those services.

The fourth program is a USC California hospital program. They have developed a cross cultural curriculum which focuses on economic compliance, decision making and political aspects of health care in the Hispanic community. Their emphasis is on home visits and on teaching residents to work within community agencies so that they can better offer the resources available.

I looked at several demographics to determine which populations within the Mexican-American sampling were encountering barriers. Looking first at income — less than $10,000 and greater than $10,000. You can see that those with low incomes are encountering more barriers, or almost 30% compared to those with incomes greater than $10,000. For preventive barriers, although a large proportion are not being prevented from getting care, a significant portion are. For those with less than $10,000 income, almost 20%, are prevented by at least one to two barriers or more. Approximately 15% are encountering three or more barriers.

Looking at education: whether a person has less than high school, or greater than high school, has no statistical difference. Over 20% of the population encounter at least one barrier, and about 15% encounter three or more barriers. Again, looking at those being prevented, its pretty equal: approximately 10% are encountering three or more barriers, and the summary categories are a composite of the two previous figures.

The two primary chronic conditions affecting Hispanics is hypertension and diabetes. I looked at these variables to see if diabetics were any different from non-diabetics. Although there are no significant differences, you still have a high rate that are not receiving medical care — who are encountering barriers.

Let's look at hypertension. These persons have been told they have hypertension by a physician and these are significantly different between non-hypertensives, and less than 20%, for three or more barriers. For non-hypertensives on the hypertensives, and less than 20%, almost three or more barriers. For non-hypertensives on the prevented rates, again more hypertensives encountered one or two barriers and upwards of 20% three or more. Again, slightly less than 20% of these people are not getting the medical care for the reasons listed before. The summary table again indicates that for hypertensives, upwards of 30%, are not getting care. I think what this data points to is, in addition to the socio-demographic variables, that the low income have a chronic condition and no health insurance coverage. You have 'three strikes and you are out' in getting preventive care, or continued care for your chronic condition. I feel nothing really has changed in the last twenty years, except more investigation on Hispanic health.

You, as health professionals, have a certain degree of responsibility for improving these conditions, because you are out in those agencies, or you have some effect on policy, and you can make a difference and I think a difference must be made. It is not enough to see high rates. The real point is you are seeing rates of preventive barriers for the population that is in most need of services, and that is the crux of the problem. The conference theme, "Assessment to Actions" is appropriate for this data. This is recent data and I think you as health professionals, and me as a researcher, can hopefully make an impact upon policy, considerations and recommendations, to improve access of availability and acceptability of services.

Mrs. Flood

Let me introduce our next speaker, Robert Montoya. Bob was born and raised in Los Angeles. He attended UCLA, he is a graduate of USC Medical School. In 1971, he received a masters in public health and completed a preventive medicine residency at UCLA's School of Public Health. During the mid-70's, he co-founded a national Chicano health organization that recruits and supports Chicano medical and pre-health profession students, with established offices in Los Angeles, San Jose, Albuquerque, Denver, San Antonio and Chicago. Currently, Bob is working at the Chicano Studies Research Center at UCLA and on the HISMET elective program that is sponsored through AHEC.

Robert Montoya, M.D.

Let me start with the AHEC mission. The AHEC program was started in 1971 as a health manpower education program. When the AHECs first started, it was perceived as a rural problem, and eleven of the first AHECs were mainly rural focused. Most of the activities were aimed at maintaining health professionals in shortage areas, and addressing isolation problems, and the need for continuing education. Since then, there has been more of an urban emphasis.

When I walked in the USC med school in 1967 there was one other Chicano in my class and one black guy and one mulatto. The UC San Francisco Dental School, in 1967, was the only public dental school until UCLA started in 1963 but in a 23 year period not a single black person had been admitted to UC dental school. We're basically talking zero base of minority training prior to the late 1960's so I'm going to go through some numbers that will indicate that there's been some progress since then. In 1978, 260 Mexican Americans were admitted to U.S. medical schools and 75 were Puerto Ricans. In 1986, nationally, there were 331 Mexican Americans and 111 Puerto Ricans in U.S. medical schools, a 31.9% increase over the past eight years. Some progress, but clearly still not representative of the population.

In California, in 1978, 59 Mexican Americans, and four Puerto Ricans, a total of 63, 6.4% in 1986, 86 Mexican Americans, and 6 Puerto Ricans, a total of 92, 9.6%, almost double digit . . . an increase of 46% admitted to medical school. I will say that working for us at the state level was the hard dollar support. We effectively linked up with some minority and other interested legislators and received 75 million dollars in state money to enable medical schools to more cost effectively meet the needs of the tax payers in the state of California.

Another of the programs that has been used effectively through AHEC is the enrichment program. We heard yesterday, during the panel discussion concerning black persons, about the summer enrichment programs they have been running in Ohio with AHEC funding since 1980. It was directed at the high school level. Two of the original six who started in 1980 are now in medical school. These summer enrichment programs work, they include a combination of academic science work, study skills, and motivational health care delivery sessions, and the like.

I would like to focus on the post-baccalaureate program, which has not received a lot of attention. There are only about three or four of these programs in AHEC, the major one being at Creighton University in Omaha, Nebraska. They have had a post baccalaurate program there since 1975. This program is aimed at the minority students who have been through the whole medical curriculum process — four or five years in college, applying to medical schools, traveling for interviews, and being rejected by every med school they have applied to. In 1975, this training program started with 20 minority students who had been rejected by all of the medical schools to which they had applied, by the way, this is a requirement of the program. Since then they have had 220 students, and 85% of them have been accepted by a medical school after the 8 month post baccalaurate program. The AHEC program in California had the wisdom to see this program as a very cost-effective method of increasing the number of minorities that would be admitted and trained specifically in medicine. The University of California, Irvine, started a similar program in July, 1986, with 16 students. As of June 1, 15 of those 16 students have been accepted to med school and will be entering this September. This is exceeding our best hopes.

I have written an article in Health Pathways, a state newsletter with a circulation of about 11,000, about the need for post baccalaureate programs. Our state could use an additional $400,000 in funding in addition to our AHEC funding, and I think we could increase minority admissions in medical schools by about 25%, with just three or four post baccalaureate programs in the state of California.

Let me lastly touch on faculty development. In California, there is a total of 3,180 MD faculty. There is a total of 50 black faculty, or 1.6%. There are specifically, 0.2% Chicanos, out of 3,180 faculty. The Texas numbers are a little better. But in New Mexico, I think there are three faculty.

Mrs. Flood

I would like to comment on the composition of medical school faculties. I think sometimes we look at charts that are produced by the AAMC that categorizes Hispanic faculty members. I think you should be aware that there are large numbers of Hispanic faculties in the country, but they are not native Mexican Americans and in our part of the country, it's very crucial to have these persons. We have many very talented and gifted foreign physicians from Central and South America who over the years, due to coming here for post graduate training and then remaining, became academicians and are high caliber clinicians. However, their point of reference in teaching our students, although many of them do fill the role model and do have links to our native Hispanics born in this country, is different. Their reality factors are different from the native Hispanic population, and it is a little disconcerting. Bob says the Texas numbers are better, but if you look at the professorial ranks in departments where there is modeling influence beyond what they can offer on a one-to-one basis with students, the numbers are still deplorably low and is a dilemma that we must address.

Our next speaker is Kathy Flores and she is a Californian. She was born and raised in Fresno, California and she was a migrant farmworker, seasonally working with her family until age 16. She did her undergraduate work at Stanford University and she attended medical school at UC Davis. She completed her residency in family practice in the Valley Medical Center in Fresno. Valley Medical Center was one which had the benefit of some AHEC development funds early in the history of the California AHEC. When Kathy got there, it was probably the last year of funding under AHEC. She then did a fellowship in family medicine with specific emphasis in Hispanic geriatrics at UofC at Fresno. Since 1983 she has been in private family practice in Fresno and serves the predominantly Hispanic population. She has been very active in the Hispanic medical education committee since it's inception in 1984 in California.

Kathy Flores, M.D.

I am passing around a pamphlet designed by AHEC to help describe our program. I am not going to elaborate on the need for Hispanics in medicine or in the health professions. The need is very clear. The presentation yesterday indicated that the needs of the under-representation of Hispanics in the United States, who provide health care. Let me just say that this need was recognized by AHEC and the government several years ago, and because of that, the Hispanic Medical Education and Training Program was formed. Specifically in California the 1980 census showed that although 19.2% of the population was Hispanic, only 1.7% of the physicians were Hispanic to serve that population. This was a commentary on the barriers the Hispanics faced, in terms of language and cultural issues, as far as access to health care. The speaker commented on the reasons for this situation. Let me just add that I would not be surprised that Chicanos may not be aware of cultural and language barriers that have prevented their access to health care, because they are not really knowledgeable as to what is optimal health care. They have not had the experience of receiving health care from somebody whom they can understand in terms of language and culture. To ask them whether that is a problem, unless they knew that there was something else, they may not see that as a problem. I see this as a private practitioner. Patients who speak no English come to me with a chronic disease, and do not really have any understanding of it. The physician they had could not really explain that to them nor could he explain the medication to them. It was never fully explained in their language, therefore they do not realize that they did not know. It had to be explained to them in a language they understand.

The Hispanic Medical Education Committee was formed in 1984 with a Federal award of $60,000, for planning. A statewide committee was selected that was representative of all the California medical schools. Implementation of the program began in 1985-86, but the start-up was delayed because it was a 50% reduction in the planned funding for that year. The principal achievement during that period however, included the planning and development of nine individual programs, with a total budget of $135,000. On October 1, 1986, the first year of implementation began with a budget of $554,000. An additional year of Federal funding is expected to begin in October of 1987 with a planned budget of $500,000. Overall, the committee felt strongly that a major element in any effort to improve health care had to include the continued expansion of recruitment and retention programs which increased the number of medical professionals. Beyond this, however, the charge of the committee by AHEC and the Federal government, was to focus on residency training, scholarships, faculty development, practice establishments, C&E programs, and to attempt to integrate all of the above with current programs already available in the state, so as to minimize the duplication of services. The program objectives are clearly defined in your brochures, so I will not elaborate on those.

Let me summarize briefly. As we have ten programs. I'll start first with our new residency family practice program. The main purpose of this program was to attempt to centralize at one site the development of a training program whose goal was to prepare physicians to work effectively and comfortably within a Hispanic community. We felt that training residents within their environment, and with the population that they would eventually service, was optimal.

Together with the location of the program, curriculum development was equally as important. We wanted a curriculum developed that would be socially, culturally, economically and linquistically sensitive to the needs of those patients.

Another aspect of the program would be practice management training, so that when residents completed their training, they would be comfortable setting up a practice or joining a group in these communities. One of the problems we find is that as Chicano residents leave their residency training program, and have to make a decision about where to set up practice and how to set it up, it is very frightening, particularly in this day and age. We also focused on selecting a site that could maximally benefit from our presence there. The program that was granted the award was USC White Memorial Medical Center in East Los Angeles, where there is a high density of Hispanics. The hope was that many of the resident graduates would train there and choose to stay and set up practice in an area that is obviously underserved. We hired an administrative director and a consultant medical director to begin implementation. Thus far, the USC department of family medicine and the White Memorial Medical staff and administration have endorsed the plan. An application for accreditation has been submitted and we are currently recruiting for a medical director. Renovations are being made at White Memorial Medical Center for the family practice clinic site and we are also looking at clinic sites in which to place residents for their clinical training. The first residents are scheduled to be selected in the 1987-88 year; and enter in July 1988.

STATE FUNDING AT PROJECT LEVEL

Moderator: Ken Proefrock

John Payne

I would like to look at some of the factors that are important in our funding. Two of the important factors in the ability of the North Carolina AHEC program to receive state funding were: first, a commitment by the medical school to service the state; the legislature. This was mainly accomplished by our Dean who was dean for 23 years, and he had built a four-year school from a two-year school in the early 1950s. He had trained just about every physician in the state. He also had kept a relationship with the legislature as to what we were doing to serve the state. He did that in a variety of ways. After resigning as dean, Dr. Reese Berryhill formed and directed the Division of Community Medical Care. This was in the mid-60's and that division was responsible for all the outreach programs in the state.

In the beginning we had federal regional medical program funds through the University, and foundation funds through the community hospitals in the state. This supported a small nucleus of community-oriented medical education programs. Using the strong base built over the years, Dr. Berryhill was able to get about a million dollars from the state by the early 1970's and this was prior to the federal AHEC dollars being available. By these actions, the groundwork had been laid for programs involving medical continuing education and medical student rotations to community hospitals. When the RFP for the federal AHEC program arrived in the summer of 1972, the timing was just right for the next step. The federal program was right on track with our efforts. Under Glenn Wilson's leadership, we applied for and received a five year contract in 1972 to develop and implement three Area Health Education Centers in the state.

The federal contract made a great impact in the state. It broadened the focus of the program through our four sister schools of nursing, dentistry, pharmacy and public health. Before that we had had very little activity, if any, with those four schools. It gave credibility to a federally funded program by the use of a five year contract. You can imagine going out and talking to community hospitals about a one year grant that you were going to get, and their response to having funds for one year. This gave us a long term commitment by the federal government that we could use with the centers that we were developing. It also created an interest in our university governing structure and education committees of the legislature, which partially prompted a study and plan for higher education. It also created an interest in other

communities that had not been included in the original proposal, so we certainly liked that competitive prospect.

At this same time, our state was experiencing a great shortage of physicians and a distribution problem. North Carolina ranked 37th nationally in the physician-to-population ratio. One recommended solution to this problem was to building another four year medical school, state supported. This created a lot of debate in various circles, as you might imagine, especially higher education, the legislature and the media. The ruckus created a lot of heat, but not much light. Since we North Carolinians couldn't agree among ourselves, we appointed a panel of medical consultants, all of whom were from outside North Carolina. They produced a booklet called the Statewide Plan for Medical Education in North Carolina, which came out in 1973. The report recommended to the Board that a plan should be developed to build on the AHEC concept to include the other two schools of medicine (at the time there were only three) and this plan was developed by the Board in consultation with our office.

In July 1974, the AHEC program became statewide — nine centers with state funding. The second state-supported medical school was also built and became an affiliate of the Eastern AHEC. We were seen as a program that could solve the problem of the shortage of physicians and the problem of distribution. It also recognized that better distribution of all health professionals was needed to make any one discipline better. State

funding for the AHEC program came following a major effort through the normal channels of the University to the General Assembly. We were funded in 1972 through 1974 to increase the number and to enhance the distribution of health professionals. There was clearly a legislative intent to train family physicians. It was included in this report. Therefore, from 1974 to the 1980's, our mission was to train more primary care physicians, particularly those in family medicine. We submitted a long-range financial budget for about six years. We had to live with that plan, but a least we knew what we were going to get. It was Mr. Wilson's wisdom to request state funds to replace federal funds, and it worked. Every year that we lost federal dollars, they were replaced with state dollars. By the end of the 1970's, we had completely phased out all of our operational federal dollars and were eligible for the special initiatives.

In the beginning of th 1980's there was a nursing shortage in the state, and with our leadership, we put forward a proposal to help alleviate these shortages by having five nursing schools take their BSN programs off campus, and also to have the AHECs address the special problems that they had in each area. The program was funded by the legislature in 1981, and we were able to meet a special need in the state. We are also beginning to look at that problem again, now that these funds stay in our budget.

The next challenge that came to the program, came fromthe outside. We were requested, by a special ad hoc committee appointed by the legislature, to develop a plan to provide educational services to the state mental health system in a major effort to make the system more attractive to psychiatrists and mental health workers. The nine AHECs had developed a reputation of being able to get things done, and this prompted state officials to ask us to take on the new task. Led by Gene Mayer, we implemented a mental health education program in 1984. We will begin the third phase of that program next month, if our legislature acts appropriately, with funding scheduled to level off after the FY '88-'89 year. In each of these efforts we were meeting a major need in health education in the state and in each case, the individual AHECs received a great deal of state dollars.

I have taken all the budgets of the AHECs and summarized them by categories as reported to us each year. A typical budget of an AHEC has 61% state dollars. Our federal dollars — a great .6% this year; this next year will be 0%. Salaries of our medical faculty, 14.5% in the AHECs are derived from clinical income which is a very important part of our operating budget. Incidently, the overall dollar figure for this is about 31.2 million dollars. The continuing education, about 3%, is our AHEC contract with hospitals, consortia, etc., and we will get dollars in to provide the continuing education on a contractual basis, especially for these agencies. They also have open programs for which they charge registration fees. All of these dollars go into the operation of the program. "Other" is a category that we use to pick up odds and ends under the appropriated dollars — our nine centers have about 1.2 million dollars which they receive.

We have state perinatal training contracts, to develop responses to meeting the needs of our high infant mortality rate. We also have state developmental education center contracts, county health department contracts for well baby clinics, and a variety of other things that deal with state health departments. We also have a series of small contracts with various local agencies that we are also doing as a specific thing in our communities to help the agency out.

In summary, we have talked about some types of state data which would be helpful to you in presenting your case and justifying your request. We reviewed a short history of the program and how we were funded in North Carolina. Now we are looking at the summary budget for the nine centers. The major portion of the state dollars going to an AHEC comes from the efforts of the state system. It does not mean the same type of funding cannot be achieved on a smaller scale. But I think it should be directed through one request to your legislative body, and that would give you the leverage to look at things on a local level.

Mike Byrne

I would like to take a few minutes to talk through at least the highlights of the development of the program in Kentucky. The program as it began in Kentucky was called the AHES program, which is the Area Health Education System, and that has evolved to be called more commonly now, the AHEC program. We will use these words interchangeably, but they all grew out of the same basically educational concerns and philosophies that led to North Carolina and most all of the other programs, during the 1970's and early 1980's. They all were based on things found in the Carnegie Commission report. In terms of some relevance to my background, during the mid-70's, I spent time at a regional office that is not too distinct from an AHEC office; much smaller than perhaps many of you are used to in that it was just myself and a clerical person and most of the work was out of my car. But I did have experience in that context in Kentucky in the 1970's, and in the beginning of the 1980's I worked in the higher education coordination office at the state capital in a role related to these programs.

I then had the opportunity to move to the University of Louisville Medical School and take that role. I will take a few minutes to go through the history and then talk about a program that was an outgrowth of the AHES effort. As we look at AHEC now, many of the things that we wrestled with in Kentucky have become very important concerns of the national program. Namely, those communities that are being left out of the whole educational continuum and the reliance upon northeasterners, our foreign graduates and our city graduates to somehow change all of their backgrounds and decide to begin to practice medicine, or begin to assist, in clinics in the very rural areas. We will get back to that in more detail.

The story began when the application for a federal AHEC program was turned down in 1974. This is one of those hopeful cases where the rejection of an application did not really turn out to be an embarrassment at all. It happened that fiscal circumstances and the openness of the governor was such that the state said we will do it anyway, with state funding. For several years the area health education system went through this evoution.

As we talk and compare notes, a great deal of the same things were done. The big difference from the beginning was that there were not large independent staffs, and those staffs in the centers never did evolve to a large size. It was primarily a person traveling, a coordinating person, and then commitment from individual hospitals or clinics or nursing homes of their staff time and their assistance to the students. Most of the funds were used to support the costs of faculty travel, etc.

Near the end of the 1970's, our state encountered fiscal restrictions that led to the closing of these regional offices. From 1980 through 1983, the program operated out of the universities with the state support. In 1983-84, about the same time that we received federal funding, the idea of a center approach was resurrected and reinstated. Since that time we have become much more in the family mode of the traditional AHEC, in that Kentucky is in the process of developing four centers. In terms of money, our size, our staff, we are probably on the small size compared to the budgets quoted earlier. The program started as a grant. From the period 1974 through 1980, that process changed from a grant to a general assembly funding program that is now a regular higher education appropriation, using grants terms.

I'd like to refer to a program that spun off of this and became a grant program and continues to be so. It may relate more directly to what the topic is, in terms of project and how projects can be funded with a state program. One historical difference from the North Carolina reference is that almost from the beginning, the external pressure on the health science's centers is what fed this movement. Another thing that we have found consistently is that everything has been done rather gradually, with some near consensus as we would address problems. No great huge windfalls of money or a leader came forward. It has all been a very steady, calm movement over many years.

As we were doing this kind of work in the late 1970's, a kind of biennial commission was formed again in 1978 to try to determine why there were not enough rural practitioners and why there were

not enough rural students in the health profession schools. Essentially, a plan was formed that was to provide professional education and services to the underserved areas of the state, in Kentucky, that is the majority of our state. Also, our state legislature is overwhelmingly rural. The response then as it was applied to AHEC was pretty easily discounted, that is how were we ever going to address any of the problems that were so important to AHEC if we didn't get rural attention into going to professional school and then getting into medical and dental school?

The assumption was that it was much more likely that a rural native would want to go back to the rural parts of the state than one from the urban areas. Maybe three times as many rural students will go to an isolated rural area than a city person. We began doing this in 1980; it has been very popular. It has amounted to a tracking system, and since that time, we have been tracking high school students and trying to learn from those who pursue medical or dental careers, as well as those who did not. It continues to be a grant; it continues to be participated in equally by almost all facets of the program — the rural practitioner, the rural hospital, the university admission's officer. We now have students in their third year of medical school, and next month, the first group of these students will take their first AHEC rotation.

Again, we would like to point to that as being a very comprehensive approach to a rather complex problem. Gradually now, over a number of years, we may be able to come back with numbers that would be relevant to others starting out. But we do think that addressing the problem, doing it in this long-range method and again doing it with a grant, and being adaptable to changing it, has served us well and would serve many of you. It grew directly out of the concerns of AHES persons when they were confronting manpower issues back in the late 1970's.

Ned Baker

I am going to share with you some of our experiences in applying to other state agencies for projects in cooperation with the AHEC program. It has been recently recognized by some of the state groups and agencies in Ohio, that the AHEC program is a bridge by which they can achieve some of their community goals and objectives. There have been some partnerships formed as a result of our working closely with some of the state agencies, particularly with the Ohio Department of Health, and the Mental Retardation and Developmental Disabilities groups in Ohio. During the next year we hope to build on these partnerships. We are thinking in terms of trying to have a statewide conference during this time, with many of the agencies in Ohio, to explore further how we can develop these kinds of partnerships.

Let me share with you some of the things which we have done at NCO in the northwest Ohio AHEC program. One of the first projects that we were able to accomplish was a project put together by our primary health education center. Sharon Lilly was the coordinator on this project and I was serving on the health promotion disease prevention block grant for the Ohio Department of Health. We knew that there were some objectives that the Department of Health had, and we also recognized that there was a possibility of their interest in having an AHEC become a part of their efforts to hit a target group — senior citizens. As a result of this, Sharon put together a grant of about $17,000 to do a project on helping seniors stay healthy.

The second project that is now in the process of being developed in our area is the Division of Maternal and Child Health. In September of last year, a notice crossed my desk from the Division which indicated that there were several counties in Ohio, 14 to be exact, which were eligible to be applicants for child and family health service grants in the state of Ohio. When I looked at this and the counties which were eligible, I quickly observed that over 50% of those counties were in our AHEC region. We thought about the possibility that the AHEC program could provide some service or input that would help these counties become involved in the grant application and in the project. We convened a meeting of the Area Health Education Center people, the public health departments within those counties and representatives from the state health department and discussed what kind of program or project could we consider filing for that would be useful in that particular region. The result of this meeting was that two counties made a commitment that they were going to file for a grant to start a program within their areas.

I think some of the unique features of this were that this was an opportunity in which public health people and private physicians who were from our AHEC areas sat together and talked about how they could work together to get a project going within their particular counties. AHEC agreed to be a part of the development of this project. They participated in the planning and they put something into the grant that would provide for the actual clinical service by the Bryan Medical Group. This is a major group of physicians within Williams County. This was kind of a hurdle — the first time that the Department of Health had that kind of a request to involve private physicians in the child and family health service grant. Once they were able to get over that hurdle, they did go on with the project. It has now been funded and is now in the stages of getting started. Also included in the program were educational components, which will enable AHEC and the medical college department of pediatrics to provide some educational training for the health department staff, which will be involved in the program. AHEC is also going to be developing a catalog of educational resources to go along with the project.

Another activity that we have been involved in is part of a state-wide effort, it is a project on the prevention of developmental disabilities. The centers for developmental disorders located in Cincinnati have put together a project aimed at involving the AHECs in providing educational opportunities for health professionals on the prevention of developmental disabilities, and involving the Ohio State University agricultural groups in doing the educational aspect for schools and citizens in an area. The project is in its second year. We have been involved in putting on programs for both physicians and allied health people within the area. I would invite any of you to go to the exhibits, and you will find them relative to this project.

In concluding my remarks, I would say that it is our opinion that there are opportunities available for joint projects with state agencies. It requires the development of good rapport with the state agencies, and also relationships with local agencies in order to reach a point where you can provide the kind of relationships to help develop projects with these agencies. AHEC has a lot to offer these projects. First of all, we already have an established educational network that certainly is a plus for any state agency that wants to get a program going in local communities. We have access to a lot of resources: universities in our areas; resources at the medical school; community health professionals that are already a part of the network; and experienced staff at each of our centers who have been involved in the development of education programs and have the experience in putting together these educational programs for an area.

I believe this is an area where we can look for some development of partnerships for projects and grants, which will help raise the image of the AHEC program. At the same time, we can help state agencies achieve some of their goals and objectives for communities in the state.

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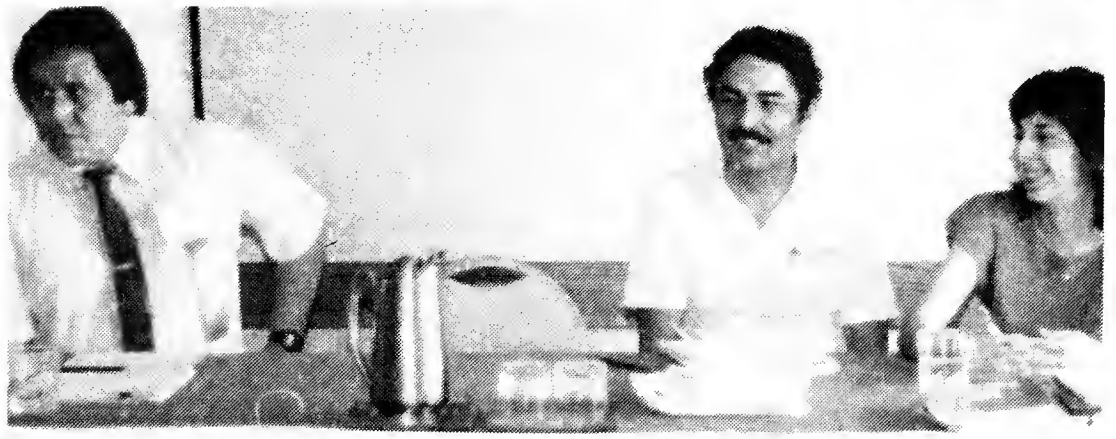

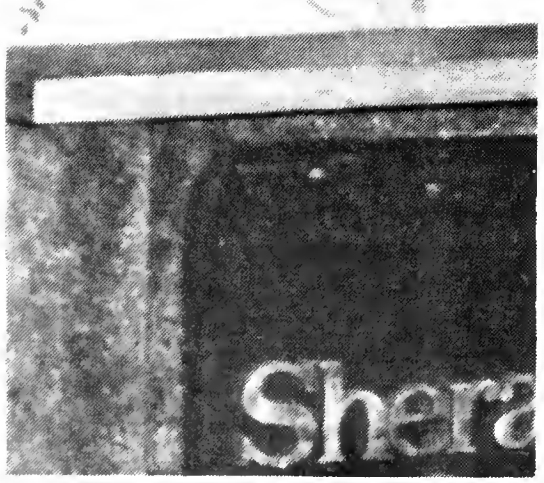
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